

60 Years of Revenue

1959 - 2018



Revenue Sources Book Fall 2018

Revenue Sources Book Fall 2018

Alaska Department of Revenue • Tax Division • www.tax.alaska.gov

Bruce Tangeman, Commissioner
Greg Samorajski, Deputy Commissioner

Tax Division Contacts

Colleen Glover, Director
(907) 269-1033
Colleen.Glover@alaska.gov

Brandon Spanos, Deputy Director
(907) 269-6736
Brandon.Spanos@alaska.gov

Dan Stickel, Chief Economist
(907) 465-3279
Daniel.Stickel@alaska.gov

Susan Erben, *Revenue Sources Book* Co-Editor
Publications Specialist
(907) 465-3376
Susan.Erben@alaska.gov

Contacts for Specific Topics

Alaska Permanent Fund:
Valerie Mertz, Chief Financial Officer
Alaska Permanent Fund Corporation
(907) 796-1530
VMertz@apfc.org

Investment Revenue, and Constitutional Budget
Reserve Fund:
Ryan W. Williams, Operations Research Analyst
Alaska Department of Revenue, Treasury Division
(907) 465-2893
Ryan.Williams@alaska.gov

Errata – April 2, 2019

Table E-1 was updated to correct an error in the reported Gross Value Reduction (GVR) impact in the production tax calculation.

Errata – Jan. 4, 2019

Minor edits were made to the chapter narratives and exhibit footnotes. The edits include inserting or changing less than 75 words for clarity, plus punctuation, spacing, and so forth. No numbers were changed.

Cover: A cruise ship sails in Glacier Bay National Park & Preserve (main photo), and a salmon swims up river to spawn (right inset). Both photos courtesy of U.S. National Park Service. The Kuparuk oil field (left inset), 40 miles west of Prudhoe Bay, began production in 1981. It is the second-largest oil field in North America by area. Photo courtesy of ConocoPhillips.



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Revenue

COMMISSIONER'S OFFICE

State Office Building
333 Willoughby Avenue, 11th Floor
P.O. Box 110400
Juneau, Alaska 99811-0400
Main: 907.465.2300
Toll free fax: 888.224.4538

December 14, 2018

The Honorable Michael J. Dunleavy, Governor of Alaska
P.O. Box 110001
Juneau, Alaska 99811-0001

Dear Governor Dunleavy,

I am pleased to present to you the Department of Revenue's Fall 2018 *Revenue Sources Book*. This publication provides a history and projection of state revenues and is a collaborative effort among the Department of Revenue and several other state agencies.

This is the department's first revenue forecast following passage of SB 26, which established a protocol for transferring a portion of the earnings of the Permanent Fund to the general fund each year. In consultation with the Office of Management and Budget and the Division of Legislative Finance, we have shown the estimated Permanent Fund transfer as unrestricted revenue beginning in FY 2019. Permanent fund earnings in excess of this transfer are still reported as restricted revenues. Chapter 7 of this book discusses this change in more detail.

General fund unrestricted revenues totaled \$2.4 billion in FY 2018. Not counting the Permanent Fund transfer, the department is forecasting unrestricted revenue of \$2.8 billion for FY 2019 and \$2.3 billion for FY 2020.

Under SB 26, the percent of market value to be transferred from the Permanent Fund to the general fund is calculated to be \$2.7 billion in FY 2019 and \$2.9 billion in FY 2020.

In recent weeks, oil prices have dipped below the mid-\$60's from a multi-year high price of over \$85.00 per barrel at the beginning of October 2018. This forecast accounts for these recent swings in price. As a result, the revenue forecast is based on an annual average ANS oil price of \$67.96 per barrel for FY 2019 and \$64.00 per barrel for FY 2020. Appendix A-1 of this book provides estimated unrestricted revenues at a range of prices.

For FY 2018, North Slope oil production averaged 518,400 barrels per day, a decline of 1.5% compared to FY 2017. The Department of Revenue forecasts that new fields will help increase production to 526,800 barrels per day in FY 2019 and 533,200 barrels per day in FY 2020.

Each year's *Revenue Sources Book* includes an in-depth analysis of a revenue related topic. This year's Chapter 3 provides a retrospective of revenue over the 60 years of statehood and is an update and expansion of the 50-year data set originally published in fall 2008.

We hope you find the information provided in the Fall 2018 *Revenue Sources Book* to be interesting and useful. The department will provide a forecast update in the spring of 2019.

Sincerely,

A handwritten signature in black ink that reads "Bruce Tangeman". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Bruce Tangeman
Commissioner
Department of Revenue



In Memoriam Wilson Condon

The *Fall 2018 Revenue Sources Book* is dedicated to Wilson Condon, one of Alaska's preeminent oil and fiscal policy experts who played a major role in shaping the state's management of its oil and gas resources.

He served Alaska in many roles, including as attorney general and commissioner of the Department of Revenue.

Condon was born in Livingston, Montana, in 1939. He received his undergraduate degree from Stanford University in 1963 and a J.D. from Stanford Law School in 1971.

After graduating from law school, Condon moved to Alaska to work as an assistant attorney general. He was promoted to deputy attorney general and, in 1980, named attorney general by Gov. Jay Hammond. During his time as attorney general, he was chairman of the Alaska Governor's Commission on the Administration of Justice. He also served on the Governor's Alaska Gas Pipeline Task Force and the board of trustees of the Alaska Permanent Fund Corporation.

Condon later went on to work in private practice. He became chief counsel to the state of Alaska in the Amerada Hess case, a major litigation with 15 oil producers regarding the valuation of royalty oil. Wilson led the complex and prolonged legal effort on behalf of the state, which eventually recovered over \$1 billion in settlements.

From 1995 to 2002, Condon served as commissioner of the Department of Revenue under Gov. Tony Knowles. It was a time marked by falling oil production and volatile prices. Alaska was spending through its savings, and Condon warned

Alaskans of the long-run dangers of relying entirely on oil to fund government. Among other solutions, he advocated for the use of a portion of Permanent Fund earnings to help pay for state services. He also expanded the scope and depth of the *Revenue Sources Book*, adding educational and in-depth chapters that continue with this publication.

Condon led the Department of Law's oil and gas section from 2003 to 2005. He returned to private practice in 2005, working at the Anchorage office of K&L Gates. There, he continued to represent the state of Alaska in oil-related litigation.

Condon died Dec. 27, 2015, in Anchorage at age 76.

At his memorial service, along with prominent public figures taking the podium to praise Condon's character, was a woman who knew Condon in retirement. She waited tables at a café where Condon and his wife ate several days a week. Condon had become one of her favorite customers. She said he took a sincere interest in everyone and treated each person with genuine respect. She had come to the service to pay her respects — not knowing much about Condon's professional past, she was astounded to learn from all the other speakers that "he was a really big deal."

We are grateful for Wilson Condon's decades of service to the state of Alaska and his enduring contributions to the state.

Photo: Alaska State Library – Historical Collections, Alaska State Library Portrait File Collection, photographer unknown, photograph taken in 1994, ASL-Condon-Wilson.

This page was intentionally left blank.

Revenue Sources Book Fall 2018

Alaska Department of Revenue • Tax Division • www.tax.alaska.gov

Table of Contents

Preface – Introduction	viii
Chapter 1 – Revenue Available for Appropriation for Any Purpose	1
Chapter 2 – Executive Summary	5
Chapter 3 – 60 Years of Revenue: 1959 – 2018	15
Chapter 4 – Petroleum Revenue	49
Chapter 5 – Non-Petroleum Revenue	69
Chapter 6 – Federal Revenue	85
Chapter 7 – Investment Revenue	89
Chapter 8 – Credits	101
Chapter 9 – State Endowment Funds	111
Chapter 10 – Public Entities and the University of Alaska	115
Appendices – Glossary	121
Appendices – Acronyms	123
Appendices – Tables	125

Preface

Introduction

Purpose

The *Revenue Sources Book* (RSB) provides Alaskans with a report of historical, current, and estimated future state revenue. The governor uses the information in this publication to formulate the proposed budget and financial plan before presenting it to the Alaska Legislature. Over the years, the RSB has become an educational tool to inform the general public of how the state's revenues are structured.

Each year, the RSB's Chapter 3 is used to provide in-depth coverage on a topic relevant to current or future state revenues. This year's chapter provides a retrospective on state revenue over the past 60 years, since Alaska achieved statehood. This is an update to the popular "50 years of revenue" narrative and data set published in 2008.

This publication is prepared by the Department of Revenue, in accordance with AS 37.07.060 (b)(4). Forecasts of state revenue are made using models developed by the department's Economic Research Group and other state agencies.

The department expresses its gratitude to those state agencies and the individuals in those agencies who have provided information, assistance and analysis for this RSB.

Throughout this book, unless stated otherwise, information is presented based on a fiscal-year basis. The state's fiscal year runs from July 1 through June 30. For example, fiscal year 2018 began July 1, 2017, and concluded June 30, 2018.

Forward-Looking Statements

All figures and narratives in this document that are not based on events that have already occurred constitute forecasts or "forward-looking statements." These numbers are projections based on assumptions regarding uncertain future events and the responses

to those events. Such figures are, therefore, subject to uncertainties and actual results will differ, potentially materially, from those anticipated.

The department attempts to capture these uncertainties in order to provide policymakers and the general public with a general understanding of the scale and scope of future revenue streams. The official forecast process takes into account many possible outcomes and attempts to minimize deviations from what is likely to happen. These figures do not necessarily represent a single scenario of a future path.

The department will update the estimates in this forecast book in the coming spring, as more information is received. This forecast supersedes all prior estimates or forecasts as the official forecast of the State of Alaska. Therefore, all prior forecasts should be used only for comparison purposes.

Defining Revenue Categories

Chapter 1 describes revenue that is available for appropriation for any current-year funding need, regardless of customary uses or restrictions. This approach gives a complete view of the state's ability to meet its obligations.

Revenue available for current-year appropriation for any purpose includes all general fund revenue, whether unrestricted or designated, as well as certain customarily restricted revenues, such as revenue that flows into the Constitutional Budget Reserve Fund. Beginning with this fall 2018 forecast, a portion of the Permanent Fund is treated as unrestricted revenue, both in the depiction of revenue available for current-year appropriation as well as elsewhere in the publication.

The remainder of the RSB utilizes revenue categories consistent with budget conventions. Revenues are divided into categories in two ways: by revenue source (where the revenue comes from), and spend-

ing restriction or designation (how the revenue may be used).

There are three basic revenue sources: 1) funds collected from in-state activities, 2) funds received from the federal government, and 3) earnings from investments. Due to the importance of revenues from oil production, in-state activities are further divided into a) petroleum revenue and b) non-petroleum revenue.

Revenue is also categorized by the level of restrictions regarding its use. Those categories are “unrestricted” (available to fund general state activities and capital projects) or “restricted” (placed into reserves or used for a specific purpose, either by a requirement or historical practice).

Any revenue that is not restricted by the Alaska Constitution, state or federal law, trust or debt restrictions, or customary practice is considered “general fund unrestricted revenue” or simply “unrestricted revenue.” Historically, most legislative and public discussion has centered on the unrestricted category of revenue, and it has been the figure most commonly referenced in budget discussions.

Restricted revenues are divided into three types: “designated general fund,” “other restricted revenue,” and “federal revenue” to aid in the budget process. Some

of these revenues are restricted by budget convention only, and are technically available for appropriation even though they are shown as restricted in this RSB.

Changes

In consultation with the Office of Management and Budget in the Governor’s Office, and the Division of Legislative Finance, a legislative agency, changes were made to how several revenue sources are depicted in this forecast, specifically to whether those sources are considered unrestricted or restricted revenue. These changes were made for consistency with budget documents and the budget process.

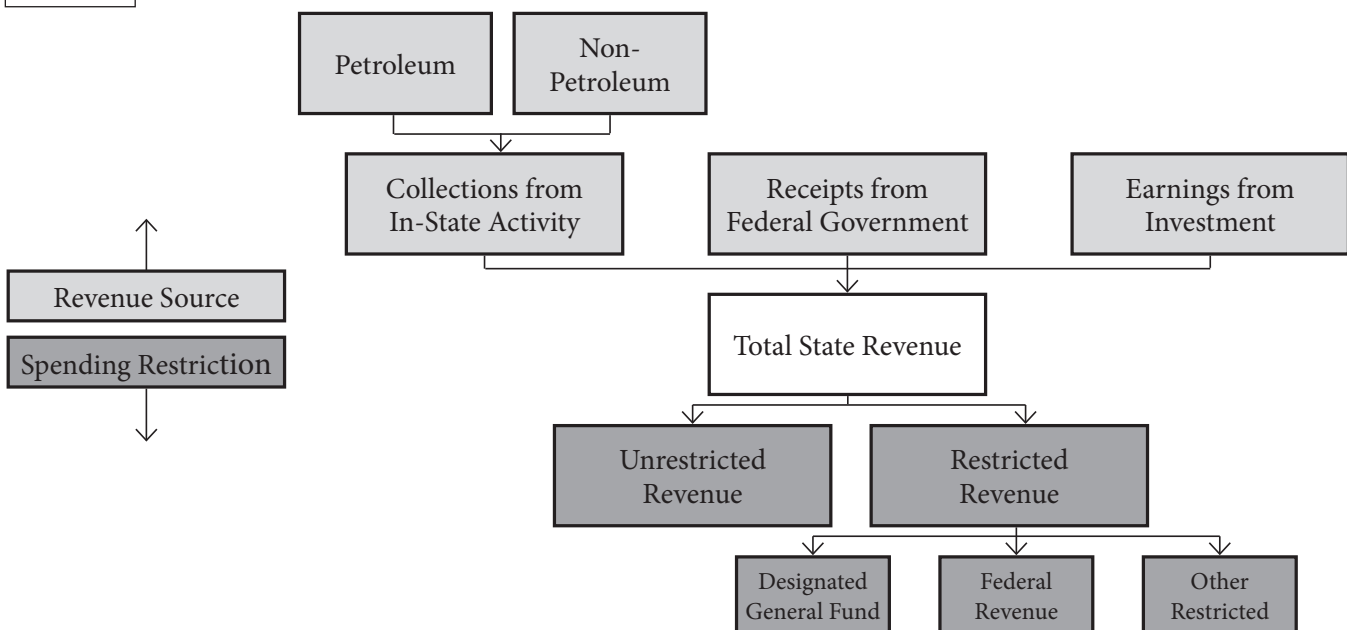
The most significant change to revenue classification is that a portion of the Permanent Fund is now depicted as unrestricted revenue. This change is consistent with action taken by the Legislature during the 2018 legislative session: money from the Permanent Fund was used to help fund the FY 2019 budget and a rule-based methodology was established for future years’ draws. More information about this change can be found in Chapter 7.

Another change to revenue classification is moving revenue from the Alaska Capital Income Fund from unrestricted to designated beginning in FY 2019.



Revenue Categories

The sources and restrictions on spending



QR Codes

Access data tables online



More information about this change can be found in Chapter 5.

In Chapter 5, changes were made to how several non-tax revenue sources are depicted to conform to how those revenue sources are presented in the state accounting system, IRIS.

QR Codes

Quick response (QR) codes are included on the first page of each chapter so that the data tables are accessible online in the Microsoft Excel format.

To access them, use a QR code recognition application with your mobile phone, smartphone or tablet to take a picture of the QR code, which looks similar to Figure P-B.

The Figure P-B QR code will take you to the RSB directory on the Tax Division website. The device will display a website with the link to download the Microsoft Excel workbook containing the tables found in the corresponding chapter.

If you are reading the RSB in PDF form, the QR code images are hyperlinked to their corresponding web addresses.

Forecast Methods Note

At times, the department's forecast numbers may appear to vary between analyses, even if they come from the same data source. This can happen for many reasons and does not necessarily discount other analyses, nor should it be considered an error.

One example is in petroleum revenue forecasting, where results can differ depending on whether the department uses confidential company-specific data versus statewide aggregated summary data.

Another instance where differences can occur is in how uncertainty is incorporated. Depending on the analysis, uncertainties can be addressed by applying risk factors to the data, incorporating probability into the analysis and results, or providing a narrative disclaimer about the uncertainty.

Therefore, even though all of the department's models start with the same set of data, the results can differ depending on data handling and how uncertainty is handled in the analysis.

To help address the uncertainty surrounding key variables in the revenue forecast, ranges are presented in certain instances throughout the *Revenue Sources Book*. For example, in Chapter 4, a low and high case are presented for oil price and oil production forecasts. In Chapter 7, a range of uncertainty for investment returns is provided. Finally, Appendix Table A-1 shows how total unrestricted revenue would vary with different oil price assumptions.

This page was intentionally left blank.



Chapter 1

Revenue Available for Appropriation for Any Purpose

General Discussion

Historically, most of the discussion on Alaska’s budget has focused on the “unrestricted general fund” category of revenue, which in times of deficiency is supplemented by “funding from reserves.” At the same time, certain current-year revenue available for appropriation for any purpose is added to reserves.

This way of defining revenue has served Alaska well by automatically placing categories of revenue in reserves. However, it is also important to accurately define revenue that is available for appropriation for any purpose so that both the Alaska Legislature, in deliberations on potentially shifting how revenue is categorized, as well as people outside the Legislature in analyzing Alaska’s budget, are able to determine the state’s true revenue potential.

Table 1-1 provides an accounting of current-year revenue available for appropriation for any purpose for the most recent fiscal years, as well as a 10-year forecast.

The State of Alaska has historically categorized certain revenues that are available for appropriation for any purpose as “restricted.” The primary use of these “customarily restricted” revenues has been largely to fund reserves.

Beginning with this *Fall 2018 Revenue Sources Book*, a change has been made to show a portion of earnings from the Permanent Fund as unrestricted revenue instead of restricted revenue. While such earnings have always been available for appropriation for any purpose, fiscal year 2019 marks the first year of a new legislatively approved protocol to appropriate earnings for general government operations. More

information about this change can be found later in this chapter and in Chapter 7.

For purposes of the current budget process, revenues are categorized as one of the following four categories: “unrestricted general fund,” “designated general fund,” “other restricted,” or “federal.” Chapter 2 has the definitions and more detail on these categories, which are agreed upon by Office of Management and Budget (OMB) in the Governor’s Office, and the Alaska Division of Legislative Finance, a legislative agency.

Examples of revenues customarily treated as restricted, but available for appropriation for any purpose include:

- Settlement revenue deposited into the Constitutional Budget Reserve Fund (CBRF), as well as the investment earnings of the CBRF.
- Royalty revenue deposited into the Alaska Permanent Fund beyond the 25% constitutional dedication.
- Most revenue deposited into subfunds or subaccounts of the general fund. For example, 50% of alcohol tax revenue is designated for the Alcohol and Other Drug Abuse Treatment and Prevention Fund.

The Permanent Fund, and Constitutional Budget Reserve Fund

Alaska receives investment earnings from a number of internal funds. Primary sources of investment income for the state are two constitutionally mandated funds, the Permanent Fund and the CBRF.

Current-Year Revenue Subject to Appropriation

FY 2018 and FY 2019 – FY 2028 forecast

Millions of Dollars

Fiscal Year	History		Forecast								
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Petroleum Revenue											
Unrestricted											
General Fund	1,941.7	2,211.1	1,688.9	1,717.8	1,657.1	1,642.0	1,620.8	1,618.4	1,729.2	1,854.6	2,024.3
Royalties to Alaska											
Permanent Fund											
Beyond 25%											
Dedication ¹	0.0	0.0	69.4	65.6	63.1	70.5	86.9	109.3	139.4	166.7	194.2
Tax and Royalty											
Settlements to											
CBRF	121.3	125.0	150.0	125.0	100.0	75.0	50.0	50.0	50.0	50.0	50.0
Subtotal Petroleum Revenue	2,063.0	2,336.1	1,908.3	1,908.4	1,820.1	1,787.5	1,757.7	1,777.7	1,918.6	2,071.3	2,268.5
Non-Petroleum Revenue											
Unrestricted											
General Fund	466.1	488.5	493.6	502.3	511.6	517.7	526.5	530.5	539.6	549.0	550.0
Designated											
General Fund	434.4	379.5	382.5	383.7	385.1	386.9	388.2	389.6	391.1	392.8	394.5
Royalties to Alaska											
Permanent Fund											
Beyond 25%											
Dedication ¹	0.0	0.0	3.7	3.8	4.1	4.5	4.6	4.7	4.8	4.9	5.0
Tax and Royalty Set-											
tlements to CBRF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Non-Petroleum Revenue	900.6	867.9	879.8	889.8	900.8	909.1	919.3	924.7	935.6	946.7	949.4
Investment Revenue											
Unrestricted											
General Fund	16.3	2,795.4	3,015.5	3,173.7	3,176.1	3,340.5	3,449.0	3,521.5	3,596.1	3,670.7	3,746.4
Designated											
General Fund	40.1	21.2	47.5	47.6	47.8	47.9	48.0	48.2	48.3	48.5	48.7
CBRF	47.2	51.0	74.5	82.5	88.3	93.4	98.0	102.4	106.8	111.4	116.2
Subtotal Investment Revenue	103.6	2,867.6	3,137.5	3,303.8	3,312.2	3,481.8	3,595.0	3,672.1	3,751.2	3,830.6	3,911.3
Total Revenue Subject to Appropriation	3,067.1	6,071.6	5,925.6	6,102.0	6,033.1	6,178.4	6,272.1	6,374.5	6,605.4	6,848.6	7,129.2

Note: CBRF is an acronym for Constitutional Budget Reserve Fund.

¹ Estimate based on deposit to Permanent Fund minus 25% of total royalties. In FY 2018 and FY 2019, only the constitutionally required 25% of royalties were deposited into the Permanent Fund.

The Permanent Fund had an unaudited fund balance (principal and the earnings reserve) of approximately \$64.9 billion as of June 30, 2018. The CBRF had an unaudited fund balance of approximately \$1.7 billion as of Sept. 30, 2018.¹

The balance of the CBRF is available for appropriation for any purpose with a three-fourths vote of each house of the Legislature, as is the amount of any investment earnings, and tax and royalty settlement deposits to the CBRF.

The Earnings Reserve Account balance in the Permanent Fund is available for appropriation for any purpose with a majority vote of the Legislature. This is different from an appropriation of the Permanent Fund's principal balance, which would require an amendment to the Alaska Constitution.

For accounting purposes, the Permanent Fund is divided into two parts: principal (the non-spendable funds) and the Earnings Reserve (assigned funds). The Earnings Reserve contains both realized earnings from all the fund's investments, and unrealized gains on assets in that portion of the Permanent Fund that is accounted for in the Earnings Reserve. For FY 2019, a total of \$2.7 billion was appropriated from the Earnings Reserve for government spending and dividends.

Beginning with this fall 2018 forecast, a portion of the Permanent Fund is considered unrestricted revenue throughout the forecast, based on recent legislative action. For more information about that change, see Chapter 7.

Other Customarily Restricted Revenues

Because Alaska is dependent on taxes, royalties, fees, and other revenues that can be volatile, the State of Alaska has developed a framework of constitutionally and statutorily restricted revenue that is held in a variety of reserve funds to provide long-term and

¹The assigned balance for the CBRF in the final FY 2018 *Comprehensive Annual Financial Report* is expected to be higher than the current fund balance; see Chapter 7 for more information.

short-term options to address cash flow mismatches and budgetary needs.

The Alaska Constitution provides that, with three exceptions, the proceeds of state taxes or licenses "shall not be dedicated to any special purpose." The three exceptions are when required by the federal government for state participation in federal programs, any dedication existing before statehood, and when provided for by the Alaska Constitution.

Many state revenues are classified as "customarily restricted," meaning they are designated for a specific purpose even though the Constitution does not allow a dedication of funds. This includes most revenue deposited into subfunds or subaccounts of the general fund. The State of Alaska has historically restricted these revenue sources based on custom or by statutory direction, even though neither of these structures limit the ability of a future Legislature to appropriate the revenue for any purpose. Statutory language typically suggests that revenue from a certain source "may be appropriated" by the Legislature for a specific purpose. Such revenue is nonetheless subject to annual appropriation, even if the State of Alaska by historical practice has followed customary restrictions.

Meeting State Obligations

Understanding the customary nature of many sources of restricted revenue is important, because the ability of the state to meet its obligations is not truly reflected by the general fund unrestricted revenue category in budget documents. The state's ability to meet its obligations is provided by adjusting for customary restrictions and looking at all current-year revenues that are subject to appropriation for any purpose.

All revenues subject to appropriation for any purpose can be used by the Legislature to fund government services or obligations, including the use of funds in the CBRF and the Earnings Reserve of the Permanent Fund.

This page was intentionally left blank.



Chapter 2 Executive Summary

Introduction

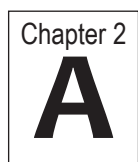
Chapter 1 provided a summary of revenue available for appropriation for any purpose. This chapter, and the remainder of the *Revenue Sources Book*, presents revenues in accordance with current budget categories and conventions as agreed upon by the Office of Management and Budget (OMB) in the Governor's Office, and Division of Legislative Finance, a legislative agency.

The State of Alaska received an estimated total of \$12.3 billion in revenue in fiscal year 2018 from all sources, a slight decrease in total revenue from FY

2017. The Department of Revenue forecasts total revenue as \$11.4 billion in FY 2019 and \$11.5 billion in FY 2020. Figure 2-A graphically illustrates the composition of total revenue by restriction and type.

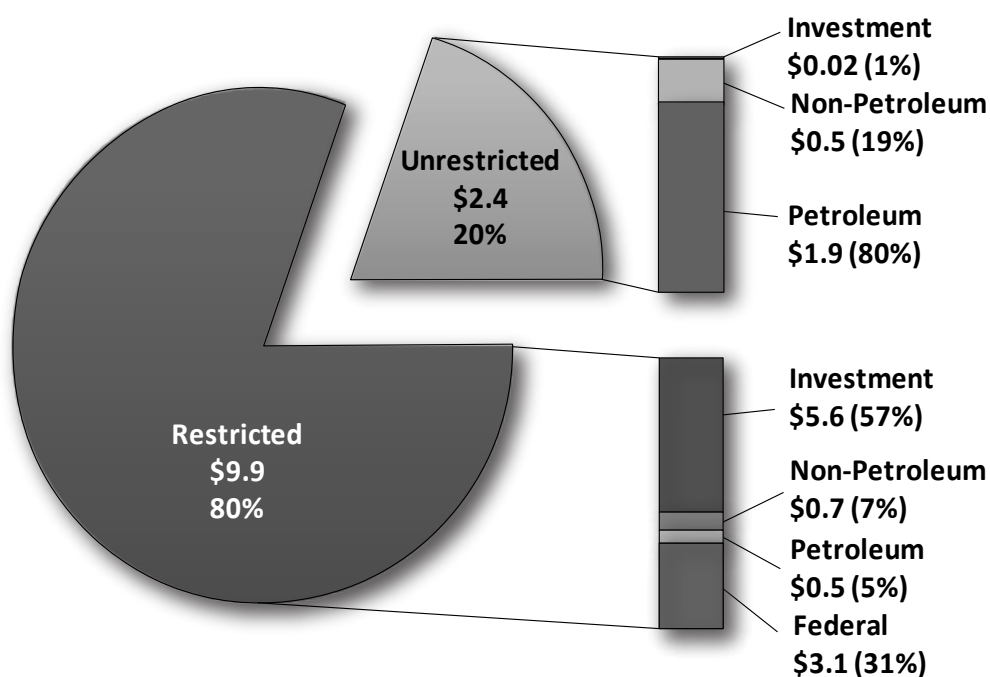
General Fund Unrestricted Revenue

In FY 2018, general fund unrestricted revenues (GFUR) totaled \$2.4 billion, with oil and gas revenues accounting for 80% of all unrestricted revenue. As depicted in Table 2-1, the department is forecasting unrestricted revenue of \$5.5 billion and \$5.2 billion for FY 2019 and FY 2020, respectively. This is a revision to the department's forecast of unrestricted reve-



FY 2018 Total State Revenue

By restriction and type, in billions of dollars



Total State Revenue

By restriction and type

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020
Unrestricted Revenue Sources			
Unrestricted General Fund Revenue			
Petroleum Revenue	1,941.7	2,211.1	1,688.9
Non-Petroleum Revenue	466.1	488.5	493.6
Investment Revenue	16.3	2,795.4	3,015.5
Federal Revenue	0.0	0.0	0.0
Total Unrestricted Revenue	2,424.1	5,495.0	5,198.0
Restricted Revenue Sources			
Designated General Fund Revenue			
Non-Petroleum Revenue	444.6	416.5	416.3
Investment Revenue	40.1	21.2	47.5
Subtotal Designated General Fund Revenue	484.7	437.7	463.7
Other Restricted Revenue			
Petroleum Revenue	484.4	496.1	544.6
Non-Petroleum Revenue	253.4	245.7	252.5
Investment Revenue	5,576.3	956.5	1,222.3
Subtotal Other Restricted Revenue	6,314.0	1,698.3	2,019.3
Federal Revenue			
Petroleum Revenue ¹	23.7	7.2	11.3
Federal Receipts	3,098.9	3,780.8	3,780.8
Subtotal Federal Revenue	3,122.6	3,788.0	3,792.1
Total Restricted Revenue	9,921.3	5,923.9	6,275.1
Total State Revenue	12,345.4	11,418.9	11,473.1

¹Petroleum Revenue shown in the Federal Revenue category includes the state share of rents, royalties, and bonuses received from the National Petroleum Reserve – Alaska.

nue from the previous forecast, reflecting among other variables, revised expectations for oil price, oil production, and company investment. Additionally, a portion of the value of the Permanent Fund is treated as unrestricted revenue beginning in FY 2019. Excluding the Permanent Fund draw, unrestricted revenue would be forecast at \$2.8 billion in FY 2019 and \$2.3 billion in FY 2020.

Table 2-2 provides an overview of the FY 2018 composition of general fund unrestricted revenue as well as forecasts for FY 2019 and FY 2020.

Restricted Revenue

Restricted revenue is revenue that has historically been used or is required to be used for a specific purpose. In general, revenue that is restricted by the Alaska Constitution, state or federal law, trust or debt restrictions, or customary practice is considered “restricted revenue.”

Restricted revenues are divided into three types: “designated general fund,” “other restricted revenue,” and “federal revenue” to aid in the budget process. As

Unrestricted General Fund Revenue

By source and type

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020
Unrestricted Petroleum Revenue			
Petroleum Taxes			
Petroleum Property Tax	121.6	126.1	119.0
Petroleum Corporate Income Tax	67.9	195.0	210.0
Oil and Gas Production Tax	749.9	815.4	479.3
Subtotal Petroleum Taxes	939.3	1,136.5	808.3
Royalties (including Bonuses, Rents, and Interest)			
Mineral Bonuses and Rents	23.6	21.8	14.5
Oil and Gas Royalties	977.8	1,051.9	865.3
Interest	0.9	1.0	0.7
Subtotal Royalties	1,002.3	1,074.6	880.5
Total Unrestricted Petroleum Revenue	1,941.7	2,211.1	1,688.9
Unrestricted Non-Petroleum Revenue			
Non-Petroleum Taxes			
Excise Tax			
Alcoholic Beverage	19.6	19.9	20.1
Tobacco Product – Cigarette	24.4	25.4	24.5
Tobacco Product – Other	13.0	15.5	16.1
Electric and Telephone Cooperative	0.2	0.2	0.2
Insurance Premium Tax ¹	0.0	56.9	57.5
Marijuana	5.4	6.2	5.3
Motor Fuel ²	0	0	0
Motor Fuel (conservation surcharge)	6.3	6.2	6.1
Tire Fee	1.4	1.4	1.4
Subtotal Excise Tax	70.4	131.7	131.1
Corporate Income Tax	119.6	135.0	150.0
Fisheries Tax			
Fisheries Business	21.2	17.3	17.7
Fishery Resource Landing	3.5	4.4	4.5
Subtotal Fisheries Tax	24.7	21.7	22.2
Other Tax			
Charitable Gaming	2.4	2.4	2.4
Estate	0.0	0.0	0.0
Large Passenger Vessel Gambling	8.6	10.1	10.8
Mining	46.9	53.5	43.5
Subtotal Other Tax	57.9	66.0	56.7
Subtotal Unrestricted Non-Petroleum Taxes	272.6	354.4	360.0

(Table continued, next page)

Unrestricted General Fund Revenue

By source and type *(Continued)*

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020
Unrestricted Non-Petroleum Revenue <i>(Continued)</i>			
Charges for Services	7.0	7.0	7.0
Fines and Forfeitures	12.5	12.5	12.5
Licenses and Permits			
Motor Vehicle	36.3	36.3	36.3
Other	0.8	2.8	2.8
Subtotal Licenses and Permits	37.1	39.1	39.1
Rents and Royalties			
Mining Rents and Royalties	1.9	1.9	1.3
Other Non-Petroleum Rents and Royalties	3.8	3.8	3.8
Subtotal Rents and Royalties	5.8	5.7	5.1
Miscellaneous Revenues and Transfers			
Miscellaneous	36.9	23.5	22.5
Alaska Capital Income Fund ³	43.0	0.0	0.0
Alaska Housing Finance Corporation	18.4	17.4	17.4
Alaska Industrial Development and Export Authority	12.9	12.0	12.0
Alaska Municipal Bond Bank Authority	0.0	0.0	0.0
Alaska Student Loan Corporation	0.0	0.0	0.0
Alaska Energy Authority	0.0	0.0	0.0
Alaska Natural Gas Development Authority	0.0	0.0	0.0
Mental Health Trust	0.0	0.0	0.0
Unclaimed Property	20.0	16.8	18.0
Subtotal Miscellaneous Revenues and Transfers	131.2	69.7	69.9
Total Unrestricted Non-Petroleum Revenue	466.1	488.5	493.6
Unrestricted Investment Revenue			
Investment Revenue			
Alaska Permanent Fund	0.0	2,723.0	2,933.1
Investments	16.3	72.4	82.4
Interest Paid by Others	0.0	0.0	0.0
Subtotal Unrestricted Investment Revenue	16.3	2,795.4	3,015.5
Total Unrestricted Revenue	2,424.1	5,495.0	5,198.0

¹Under current law, insurance premium tax is considered designated restrictive revenue and will revert to unrestricted revenue beginning in FY 2019.

²Starting with FY 2018, the non-aviation portion of the motor fuel tax is considered designated restricted revenue and the aviation portion of the motor fuel tax is considered other restricted revenue.

³Starting with FY 2019, transfer revenue from the Alaska Capital Income Fund is considered designated restricted revenue.

Chapter 2
3

Restricted Revenue

By source and type

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020
Restricted Designated General Fund Revenue			
Non-Petroleum Revenue			
Taxes	136.5	89.8	92.4
Charges for Services	257.8	256.1	256.1
Fines and Forfeitures	11.0	4.5	5.0
Licenses and Permits	1.1	1.1	1.1
Rents and Royalties	21.3	21.1	17.8
Other	16.9	43.9	43.9
Subtotal Non-Petroleum Revenue	444.6	416.5	416.3
Investment Revenue			
Investments – Designated General Fund	1.8	7.0	7.4
Other Treasury-Managed Funds	38.3	14.2	40.1
Subtotal Investment Revenue	40.1	21.2	47.5
Total Restricted Designated General Fund Revenue	484.7	437.7	463.7
Other Restricted Revenue			
Petroleum Revenue			
Royalties to Alaska Permanent Fund and Public School Trust Fund (includes Bonuses and Rents)	363.1	371.1	394.6
Tax and Royalty Settlements to Constitutional Budget Reserve Fund	121.3	125.0	150.0
Subtotal Petroleum Revenue	484.4	496.1	544.6
Non-Petroleum Revenue			
Taxes	100.0	100.9	101.6
Charges for Services	45.0	62.1	61.9
Fines and Forfeitures	40.6	14.8	16.6
Licenses and Permits	40.1	40.4	40.6
Rents and Royalties	6.5	6.4	10.7
Other	21.1	21.1	21.1
Subtotal Non-Petroleum Revenue	253.4	245.7	252.5
Investment Revenue			
Investments – Other Restricted	3.6	14.1	15.0
Constitutional Budget Reserve Fund	47.2	51.0	74.5
Alaska Permanent Fund Restricted Earnings, net of General Fund Draw ¹	5,525.5	891.4	1,132.8
Subtotal Investment Revenue	5,576.3	956.5	1,222.3
Total Other Restricted Revenue	6,314.0	1,698.3	2,019.3

(Table continued, next page)

Restricted Revenue

By source and type *(Continued)*

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020
Restricted Federal Revenue			
Federal Receipts	3,098.9	3,780.8	3,780.8
Petroleum Revenue			
NPR-A Royalties, Rents and Bonuses ²	23.7	7.2	11.3
Total Restricted Federal Revenue	3,122.6	3,788.0	3,792.1
Total Restricted Revenue	9,921.3	5,923.9	6,275.1

¹While payouts are limited to realized revenues, both unrealized and realized are shown per Generally Accepted Accounting Principles (GAAP). Restricted earnings starting in FY 2019 consist of unrealized gains plus realized gains, less the transfer to the general fund.

²Petroleum Revenue shown in the Restricted Federal Revenue category includes the state share of rents, royalties, and bonuses received from the National Petroleum Reserve – Alaska (NPR-A).

described in Chapter 1, some of these revenues, while categorized as restricted by custom, are still available for appropriation for any purpose.

In FY 2018, restricted state revenue totaled \$9.9 billion. As depicted in Table 2-1, the department is forecasting restricted revenue of \$5.9 billion and \$6.3 billion for FY 2019 and FY 2020, respectively. Future restricted revenue expectations are lower because a portion of the value of the Permanent Fund is now treated as unrestricted revenue beginning in FY 2019, whereas for FY 2018 and prior all Permanent Fund earnings were considered restricted.

Restricted revenue is a combination of federal receipts, investment earnings, constitutionally mandated petroleum revenue deposits, and non-petroleum revenue sources that are used for specific purposes.

Petroleum Revenues

Petroleum revenues come from four components – production tax, royalties, corporate income tax, and petroleum property tax.

Unrestricted petroleum revenue amounted to \$1.9 billion in FY 2018 and is forecast to be \$2.2 billion in FY 2019. Petroleum revenue provided 80% of FY 2018 unrestricted revenue, and is projected to provide between 29% and 40% of unrestricted revenue over the next 10 years as shown in Table 2-5. This percentage is lower than the historical share, due to including a por-

tion of the value of the Permanent Fund as unrestricted revenue beginning in FY 2019.

Restricted petroleum revenue is forecast at \$503 million in FY 2019, while actual FY 2018 revenue for this category was \$508 million. The primary sources of restricted petroleum revenue are royalties deposited in the Alaska Permanent Fund, and Public School Trust Fund, as well as settlements of tax and royalty disputes deposited in the Constitutional Budget Reserve Fund (CBRF).

Four elements are critical to the determination of these revenues: price, production, lease expenditures, and transportation costs. These components are briefly summarized below and are explained in detail in Chapter 4.

Alaska North Slope (ANS) oil prices averaged \$63.61 in FY 2018. The revenue forecast is based on an annual average ANS oil price of \$67.96 per barrel for FY 2019 and \$64.00 per barrel for FY 2020. The department projects that annual average prices will increase to \$77.00 (nominal) within the 10-year forecast period.

Total crude oil production from Alaska’s North Slope averaged 518,400 barrels per day in FY 2018. The oil production forecast expects North Slope production to remain relatively stable in coming years, with production of 526,800 barrels per day in FY 2019 and 533,200 barrels per day in FY 2020, declining slightly to 498,800 barrels per day by FY 2028.

Total State Revenue, Actual and Forecast

FY 2009 to FY 2028

Billions of Dollars

History

Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total State Revenue										
Petroleum	6.1	6.2	8.1	9.9	7.6	5.7	2.4	1.6	1.7	2.4
Non-Petroleum	0.9	0.9	1.0	0.9	0.9	0.9	0.9	1.0	1.2	1.2
Investment	-6.6	4.5	8.0	0.2	5.0	8.1	2.7	0.6	6.9	5.6
Federal	2.1	2.4	2.4	2.5	2.4	2.5	2.5	2.6	3.2	3.1
Total State Revenue	2.5	13.9	19.5	13.5	15.9	17.2	8.5	5.9	12.9	12.3

(Table continued, next page)

Total Unrestricted General Fund Revenue

A 10-year forecast

Millions of Dollars

History

Forecast

Fiscal Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Unrestricted General Fund Revenue											
Petroleum	1,941.7	2,211.1	1,688.9	1,717.8	1,657.1	1,642.0	1,620.8	1,618.4	1,729.2	1,854.6	2,024.3
Non-Petroleum	466.1	488.5	493.6	502.3	511.6	517.7	526.5	530.5	539.6	549.0	550.0
Investment	16.3	2,795.4	3,015.5	3,173.7	3,176.1	3,340.5	3,449.0	3,521.5	3,596.1	3,670.7	3,746.4
Total Unrestricted General Fund Revenue	2,424.1	5,495.0	5,198.0	5,393.8	5,344.8	5,500.2	5,596.3	5,670.4	5,864.9	6,074.3	6,320.7
Percent from Petroleum	80%	40%	32%	32%	31%	30%	29%	29%	29%	31%	32%
Total Unrestricted Revenue (not including Permanent Fund transfer)	2,424.1	2,772.0	2,264.9	2,303.8	2,253.8	2,246.2	2,235.3	2,238.4	2,359.9	2,496.3	2,668.7
Percent from Petroleum	80%	80%	75%	75%	74%	73%	73%	72%	73%	74%	76%

Total State Revenue, Actual and Forecast

FY 2009 to FY 2028 (Continued)

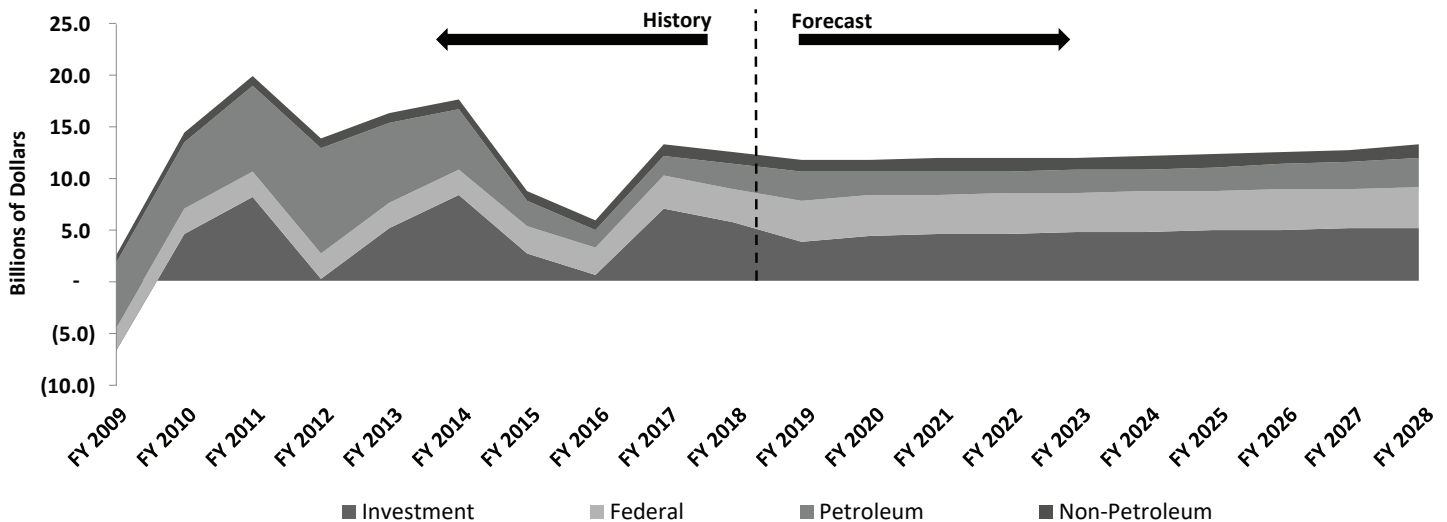
Billions of Dollars

Forecast

Fiscal Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total State Revenue										
Petroleum	2.7	2.2	2.2	2.1	2.1	2.1	2.2	2.4	2.5	2.8
Non-Petroleum	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Investment	3.8	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1
Federal	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Total State Revenue	11.4	11.5	11.6	11.6	11.7	11.8	11.9	12.2	12.5	12.9

Total State Revenue

A look back and a forecast



In FY 2018, oil and gas lease expenditures amounted to an estimated \$4.9 billion statewide, including \$4.4 billion of spending on the North Slope. Lease expenditures are expected to increase slightly in FY 2019 to about \$5.2 billion statewide, including \$4.7 billion of spending on the North Slope. Lease expenditures are expected to show several years of increases, based on expected investments in new developments.

In FY 2018, average transportation costs for North Slope oil averaged \$9.52 per barrel; they are expected to average \$8.53 in FY 2019 and \$8.64 in FY 2020, be-

fore increasing to \$10.64 by FY 2028. Transportation costs are subtracted from the ANS price to determine the wellhead value and value at point of production, and these form the basis for tax and royalty calculations. In general, transportation costs are a function of production – lower production corresponds to higher transportation costs – as well as overall inflation.

Non-Petroleum Revenue from In-State Activity

Corporate income tax revenue from non-petroleum related businesses, excise taxes, consumption taxes,

charges for services, fines, forfeitures, licenses, permits, non-petroleum rents and royalties, transfers, and other miscellaneous revenue are referred to as “non-petroleum revenues from in-state activity.” This does not include federal and investment revenues. Unrestricted non-petroleum revenues from in-state activities are expected to be \$488 million in FY 2019, increasing to \$550 million by FY 2028. Restricted non-petroleum revenues from in-state activities are expected to be \$622 million in FY 2019. Details regarding these revenue sources can be found in Chapter 5.

Federal Revenue

All federal funds the state receives are considered restricted for purposes of this forecast. Federal funds include revenues for highways, medical care, education, and other designated purposes. The state received an estimated \$3.1 billion in FY 2018, and is forecasting \$3.8 billion in federal payments to the state for predetermined uses in FY 2019. However, consistent with practice in prior years, the forecast

represents the maximum possible federal revenue contribution, while actual revenues received routinely come in below forecast. More detail regarding federal revenue can be found in Chapter 6.

Investment Revenue

Investment income is the earnings generated from certain assets such as the Permanent Fund, the Constitutional Budget Reserve Fund, and other funds. In FY 2018, the state earned \$5.6 billion in total investment revenue. The department is forecasting investment income of \$3.8 billion in FY 2019 and \$4.3 billion in FY 2020. Historically, the majority of investment revenue was considered restricted revenue. However, beginning with this *Fall 2018 Revenue Sources Book*, a portion of the value of the Permanent Fund is depicted as unrestricted revenue for FY 2019 and beyond. More information about investment revenue can be found in Chapter 7.

This page was intentionally left blank.



Chapter 3

60 Years of Revenue: 1959 – 2018

60 Years of Revenue

In 2008, in honor of the 50th anniversary of statehood, the *Revenue Sources Book* included a retrospective on the history of Alaska's revenue since statehood. In the decade since, that data set has proved to be a useful and popular resource for users of the forecast book. This year's Chapter 3 updates the historical data with an additional 10 years of information. We've also added more information about restricted revenue and total petroleum revenue.

The tables in this chapter contain revenue information since 1959, however, the narrative will focus more on events in the past 10 years. For a more extensive discussion of Alaska's revenue history, see the *Fall 2008 Revenue Sources Book*.

The Last 10 Years – A Summary

Great Recession

The national housing market crash, financial crisis, and the 18-month recession that resulted officially ended in June 2009. During this recession, the U.S. economy lost 7.3 million jobs and GDP fell 4.1%. Recovery has been slow but steady, as the unemployment rate has gone from a high of 10.2% during the peak of the crisis to around 4% today. The national economy has seen a record streak of job creation and steady GDP growth since 2010.

Alaska's economy avoided the deep lows of the recession, with housing prices only seeing negligible declines, and unemployment peaking at 8.0%. However, Alaska's recovery has not been as strong as in the rest of the country. Alaska had a low unemploy-

ment rate of 6.5% in early 2015, rising back to 7.3% by early 2018 as the economy reacted to lower oil prices and state budget cuts.

Shale Oil, Oil Prices, and Budget Crisis

North American shale oil production has been the largest unexpected development of the past 10 years in terms of impact on oil prices.

Conventional oil development takes years to bring new oil into production, creating a lag between high prices and new investment and production. Shale activity, in contrast, can ramp up (and shut down) in a matter of months.

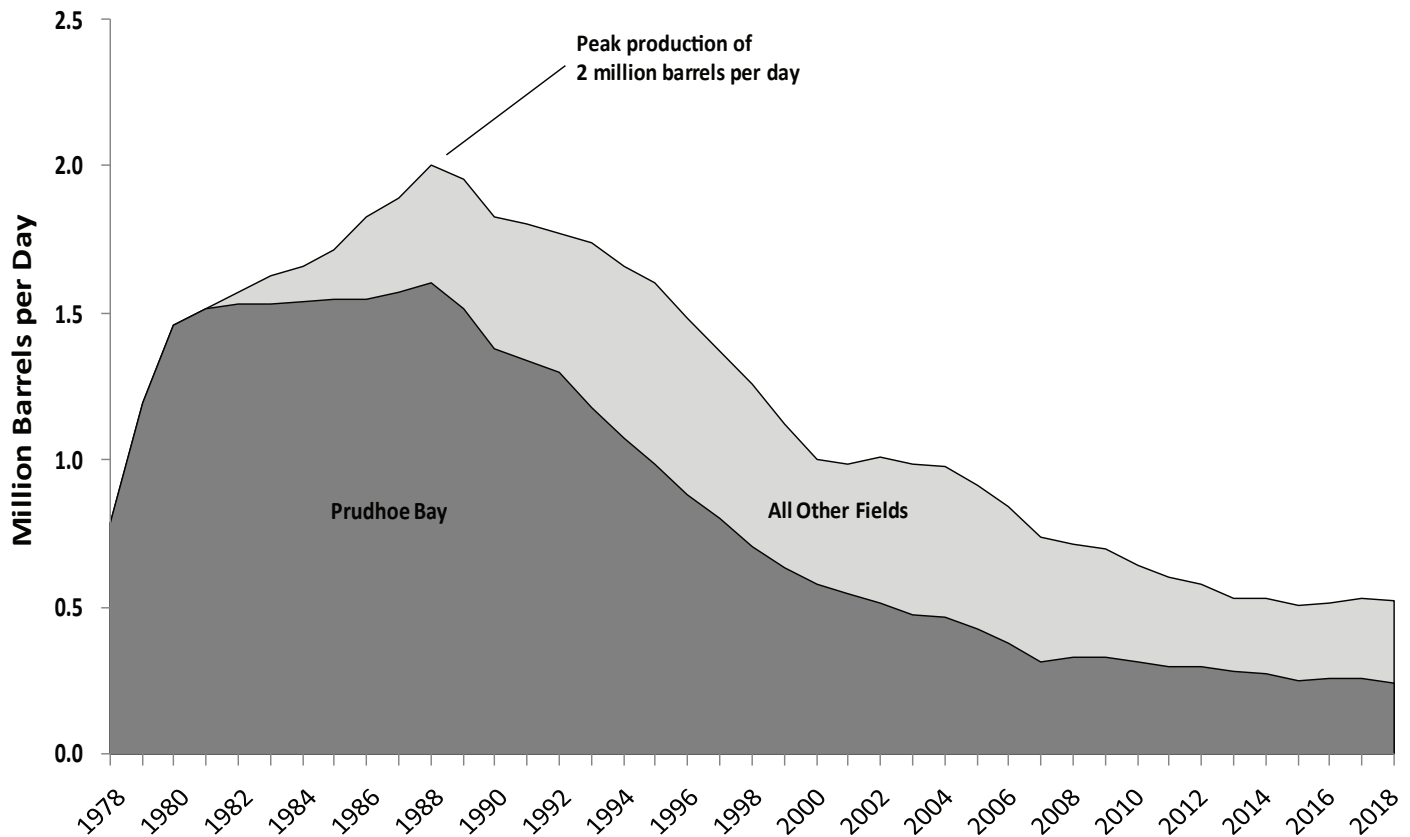
The shale revolution was a major factor in the price of oil declining in 2014-2016. The flexibility of shale production has led many to speculate that oil prices will not be able to remain significantly above \$60 per barrel, or possibly even lower, for a sustained period. The most recent year saw several months in line with a higher-price scenario, though prices have since fallen. Increases in shale production in 2018 have been restrained by producers' capital discipline as well as temporary logistical constraints.

While shale technology has continued to increase North American oil production, it remains to be seen whether shale will indeed put a ceiling on oil prices over the long term.

Due in part to increasing North American shale production, prices of Alaska North Slope crude oil plunged from more than \$100 per barrel in the summer of 2014, to a range of \$40-\$60 per barrel until 2017. Prices recovered to the range of \$70 per barrel in late 2018

North Slope Oil Production

Prudhoe Bay and other fields, 1978 – 2018



with some spikes in the \$80 range, but recently have dipped into the \$60 range again. The lower prices since 2014 have left the state with over half its unrestricted general fund spending uncovered for several years.

The fiscal gap led officials to consider numerous options for paying for government. Ultimately, in addition to budget reductions, the Alaska Legislature and Gov. Bill Walker agreed to use a portion of the earnings from the Permanent Fund to help pay for government.

Senate Bill 26 (SB 26), enacted in 2018, provided the framework for a percentage of market value (POMV) plan moving forward. Under this framework, a sustainable amount of the Permanent Fund's value each year will be withdrawn and used to pay for government and the Permanent Fund Dividend. Additional information about this change can be found in Chapter 7.

Oil Tax Changes

The past decade has been marked by regular discussion of oil taxes and several changes to the tax laws.

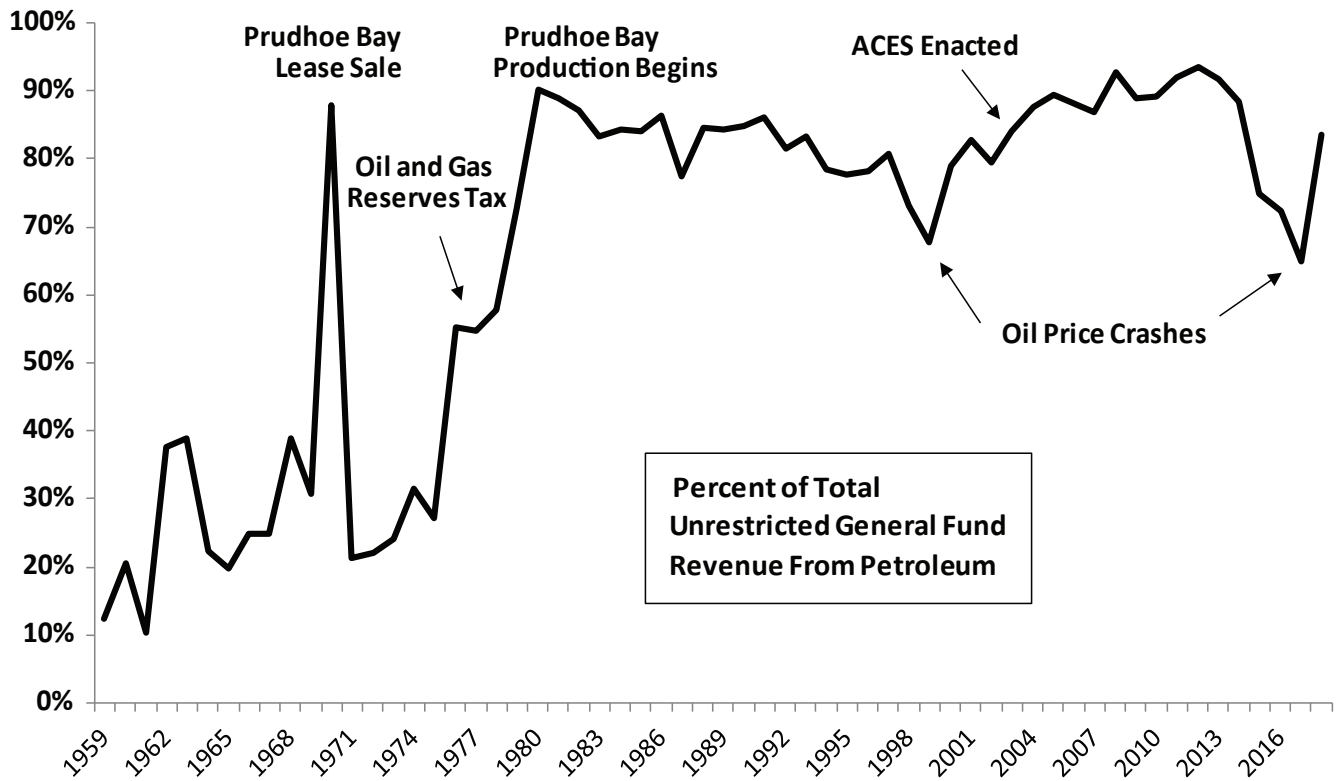
Passed in 2007, the Alaska's Clear and Equitable Share (ACES) tax was the production tax in place at the start of the last decade. ACES was based on the net profits of oil and gas production, and included substantial increases in tax rates at high oil prices as well as large credits for exploration and development activity. Specifically, ACES imposed a base 25% tax rate at lower oil prices, plus a 0.4% per dollar surcharge in that rate as prices rose above roughly \$60.

This system had several effects. It produced large revenues for the state when oil prices were high. However, its high marginal tax rate in conjunction with certain credits created some adverse incentives for oil companies, since the companies could reduce their taxes by increasing spending – at some points the state was bearing 80% or more of the companies' expenditures. The credits in ACES also left the state with large liabilities during times of lower oil prices.

Senate Bill 21 (SB 21) was signed into law in May 2013, and went into effect in 2014. It removed the progressive surcharge tied to the value of oil that was found in ACES. Instead, it implemented a flat tax rate

Petroleum Share of Unrestricted Revenue

A history, 1959 – 2018



of 35% that resulted in lower tax rates at high prices and slightly higher tax rates at low prices, compared to ACES. Instead of acting as a floor, as with the 25% ACES rate, this 35% rate acted as a ceiling. A per-barrel tax credit ranging from \$8 at low prices, down to \$0 at prices above roughly \$150 per barrel reduced the effective tax rate below 35%, particularly at low prices. A tax floor of 4% of the gross also was added to the law, which gave the state some revenue even when the profits tax calculation would have resulted in zero. During the low prices of 2015-2017, this floor was reached. SB 21 also removed the capital expenditure credit under ACES in favor of the aforementioned per-barrel credit, and implemented a new gross value reduction provision as an incentive for new field development.

Initially, SB 21 retained most of the tax credits from ACES, many of which were available for state purchase, and many of which were earned outside the North Slope. As oil prices dropped in 2015 and 2016, the state ended up in a situation where outstanding tax credits exceeded severance tax collections in fiscal year 2016. The legislation that was introduced – House Bill 147 in 2016 and HB 111 in 2017 – largely eliminated the system of cash credits, allowing com-

panies to instead recover costs against production tax over time. However, as of the publishing of this book, nearly \$1 billion of credits remain on the books.

More information about the current tax system can be found in Chapter 4. More information about tax credits can be found in Chapter 7.

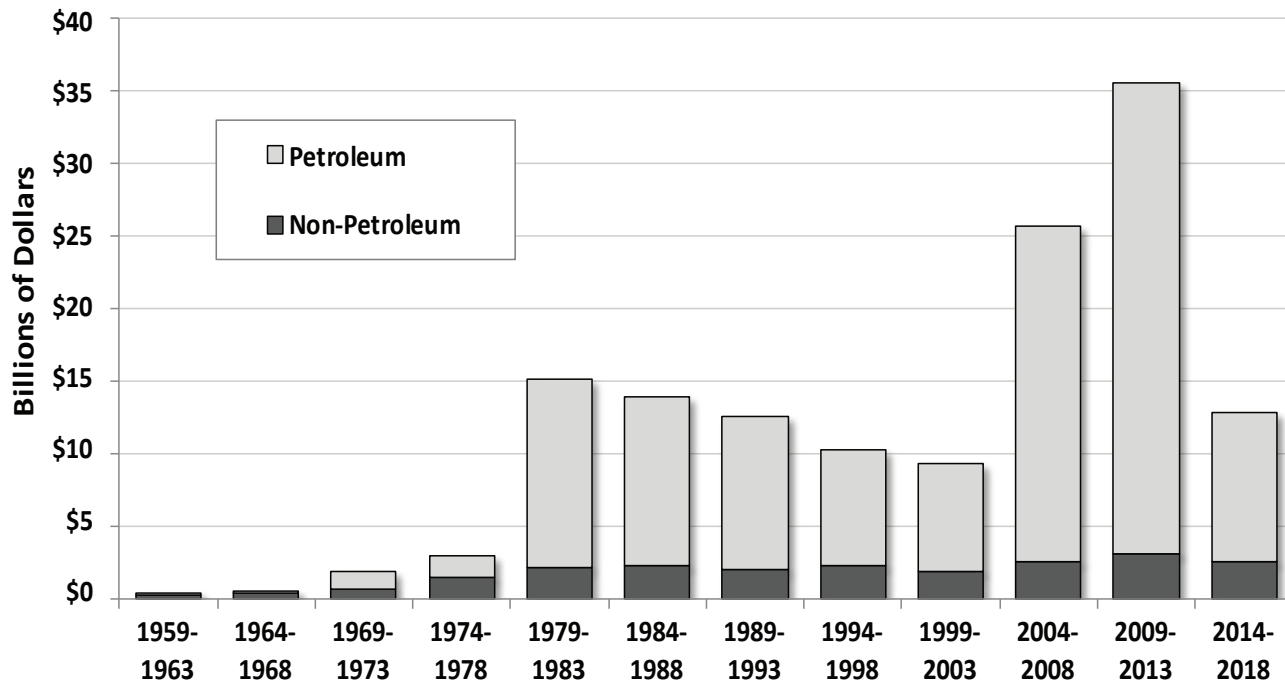
A New Tax Type

Alaska continues to function without either a personal income tax or a state sales tax. However, there was one new tax enacted over the past decade. In 2014, voters passed an initiative legalizing the sale, regulation, and taxation of recreational marijuana. The state began collecting a tax of \$50 per ounce on buds and flowers, and \$15 per ounce on other parts of the plant in FY 2017.

After a slow start, this new industry has grown rapidly, and as of the publishing of this *Revenue Sources Book*, the marijuana tax is now generating over \$1 million per month in revenue for the state. Portions of this revenue stream are designated to help fund recidivism reduction programs as well as drug education and treatment.

Petroleum vs. Non-Petroleum Revenue

Unrestricted revenue by five-year period



A Peek into the Next Decade

Many decisions made in the near future will have major ramifications for the next 10 years of Alaska's story. The details of the final role of the Permanent Fund in paying for government will be decided. The percentage of the POMV draw that will go to the Permanent Fund Dividend is still not a settled question. Depending on that draw and on oil prices, additional revenues – whether from a sales tax, an income tax, or another source – may be necessary to fund government operations. Alternatively, the Legislature may have to consider additional budget reductions, or some combination of budget reductions and new revenue in order to achieve a sustainable budget.

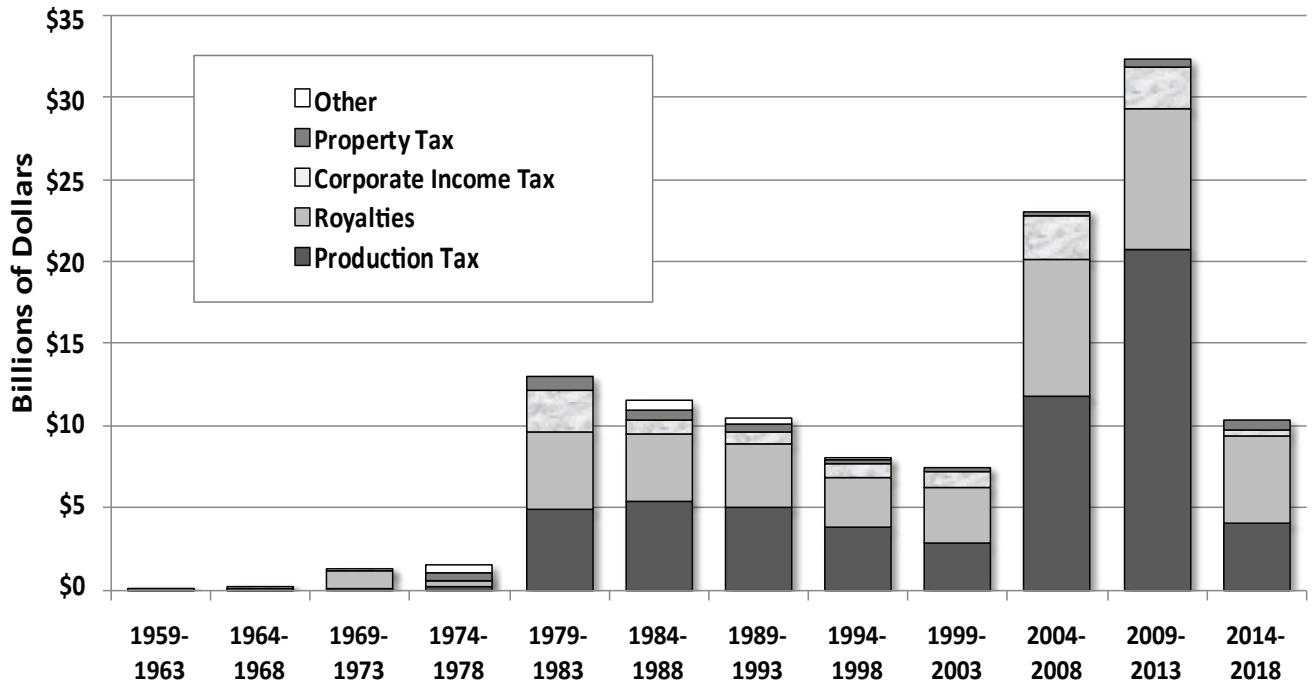
Potential sources of new wealth and opportunity for Alaska residents include a long-awaited natural gas

pipeline and exploration of the Arctic National Wildlife Refuge (ANWR). Oil exploration on federal land in National Petroleum Reserve – Alaska (NPR-A) has yielded the discoveries of Greater Moose's Tooth and Willow. Other discoveries such as Pikka and Fiord West could be developed on state land in the next 10 years. These developments could result in stable or even increased oil flow through the Trans-Alaska Pipeline (TAPS). Proposed mining operations such as Pebble or Donlin could generate wealth for the state as well.

While Alaska will continue to be subject to fluctuations in global markets, both for investments and commodities, the state possesses resources and opportunities to give reason for cautious optimism about the next decade of state revenue.

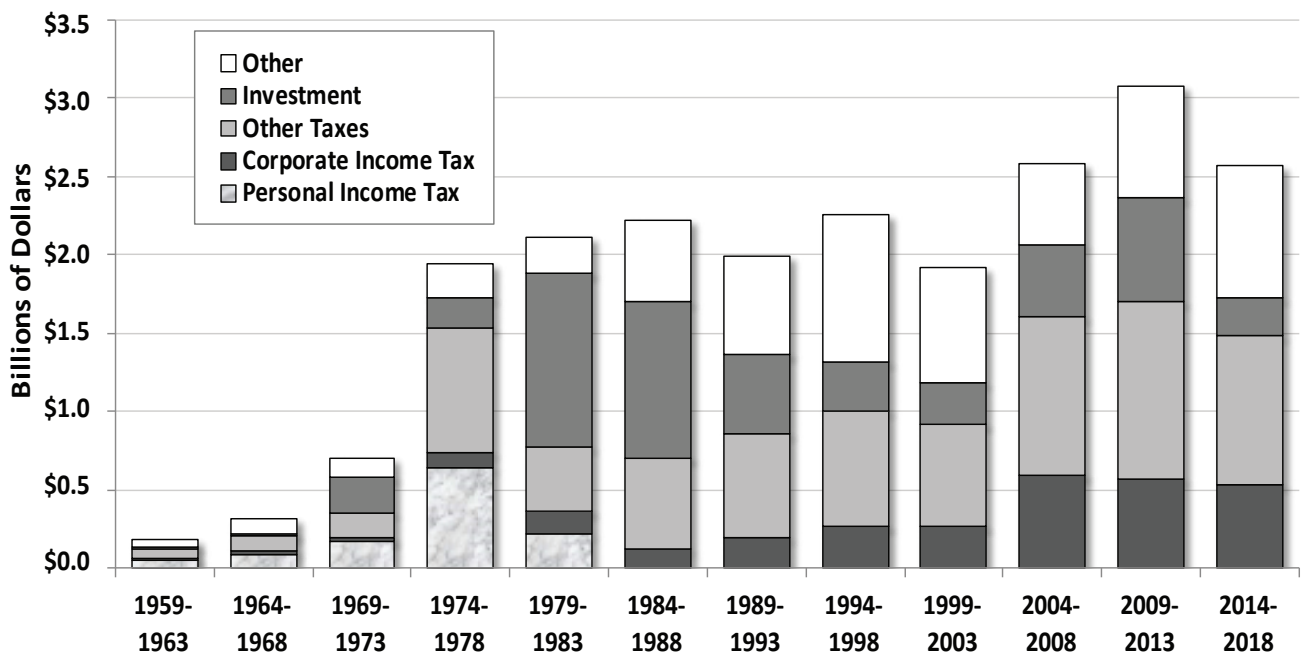
Petroleum Revenue Detail

Unrestricted revenue by five-year period



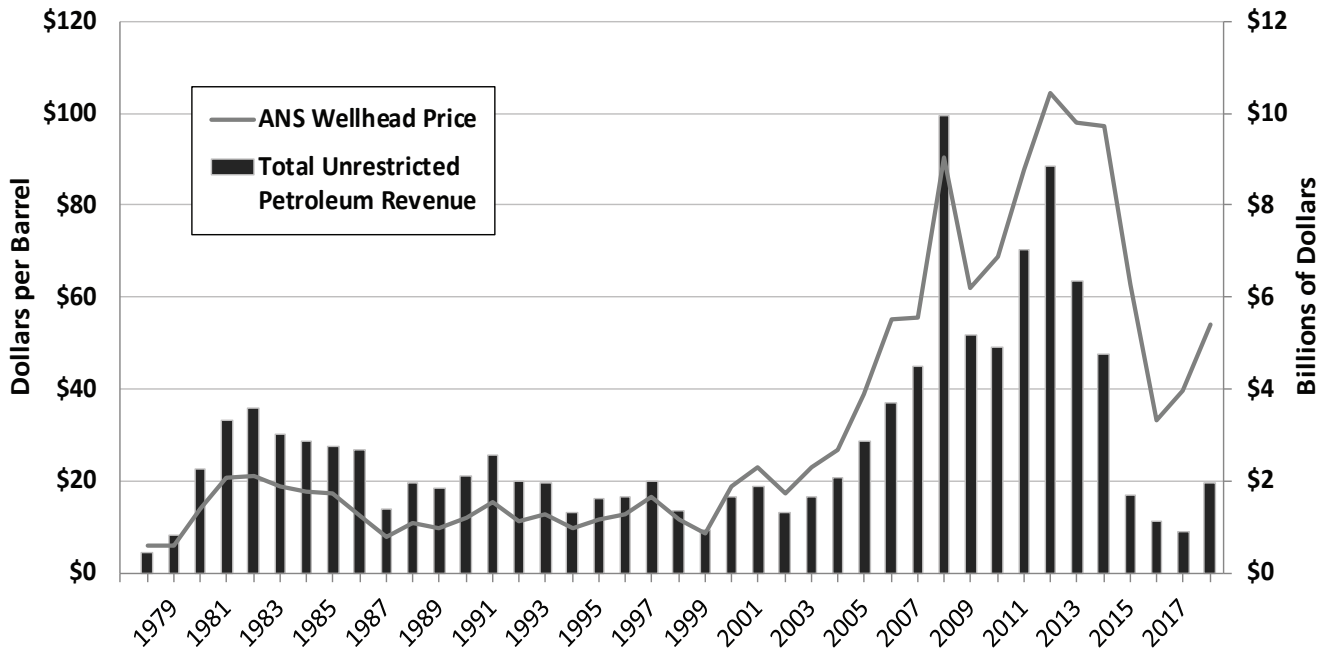
Non-Petroleum Detail

Unrestricted revenue by five-year period



Unrestricted Petroleum Revenue and Oil Price

A history, 1979 – 2018



60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018

Millions of Dollars

Fiscal Year	History									
	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Unrestricted General Fund Tax Revenue										
Petroleum Property Tax²	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excise Tax										
Alcoholic Beverages	2.1	2.2	2.4	2.5	2.8	2.8	3.1	3.4	3.4	3.7
Tobacco Products	0.0	0.0	0.0	0.6	0.8	0.8	0.8	1.0	0.9	1.0
Insurance Premium ³	0.7	0.9	1.0	1.0	1.1	1.2	1.3	1.7	1.8	2.0
Electric and Telephone Cooperative ⁴	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Motor Fuel Tax ⁵	3.1	3.7	4.8	6.9	6.1	5.6	6.0	6.6	7.1	7.8
Vehicle Rental Tax ⁶	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tire Fee	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marijuana ⁷	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excise Tax	5.9	6.7	8.1	11.3	10.9	10.6	11.4	12.8	13.5	14.7
Income Tax										
General Corporate	1.4	1.7	1.4	1.8	2.2	1.8	1.9	4.1	3.5	3.8
Petroleum Corporate ⁸	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Individual and Fiduciary	8.1	8.9	10.4	12.2	13.0	13.9	16.2	19.2	22.7	22.6
Total Income Tax	9.5	10.6	11.8	14.0	15.2	15.7	18.1	23.3	26.2	26.5
Oil and Gas Production										
Oil and Gas Production Tax	0.0	0.0	0.0	0.2	0.3	0.3	0.3	0.3	0.5	2.0
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Hazardous Release	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Oil and Gas Production	0.0	0.0	0.0	0.2	0.3	0.3	0.3	0.3	0.5	2.0
Fish Tax										
Fisheries Business Tax ⁹	1.8	1.4	2.0	3.1	2.9	2.3	2.8	3.2	3.6	2.3
Fishery Resource Landing Tax ⁹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹⁰	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Fish Tax	1.8	1.4	2.0	3.1	2.9	2.3	2.8	3.2	3.6	2.3
Other Tax										
Estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1
Charitable Gaming	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Business License Tax	1.2	1.2	1.3	1.4	2.3	2.4	2.9	3.2	3.3	3.8
Large Passenger Vessel Gambling ¹¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹²	0.7	1.3	1.2	1.0	0.8	0.9	1.0	0.9	1.0	1.6
Total Other Tax	1.9	2.5	2.5	2.5	3.2	3.4	4.0	4.2	4.4	5.5
Total Unrestricted General Fund Tax Revenue	19.1	21.2	24.5	31.0	32.5	32.2	36.6	43.7	48.0	50.9

(Table continued, next page)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Unrestricted General Fund Non-Tax Revenue										
Licenses and Permits¹³	2.5	3.1	3.4	3.8	4.8	4.5	4.5	6.3	6.2	6.6
Intergovernmental Receipts										
Federal Shared Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges for Services	0.1	1.8	0.7	0.8	1.1	3.2	3.9	4.6	5.4	7.0
Fines and Forfeitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rents and Royalties										
Oil and Gas Royalties ¹⁴	0.0	0.0	2.4	4.5	18.9	5.9	8.4	7.9	9.6	17.0
Oil and Gas Bonuses, Rents, Interest ^{14,15}	3.1	9.9	1.7	21.3	8.6	8.7	7.7	13.3	11.3	24.7
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹⁶	0.2	1.0	1.3	0.9	1.0	1.1	1.6	0.7	1.7	1.8
Total Rents and Royalties	3.3	10.9	5.5	26.7	28.6	15.8	17.7	22.0	22.7	43.5
Investment Earnings¹⁷	0.2	0.8	0.8	0.9	1.3	1.3	2.6	3.2	2.8	2.2
Miscellaneous Revenue¹⁸	0.2	10.2	5.8	5.8	3.5	10.1	17.6	6.6	1.4	2.6
Total Unrestricted General Fund Non-Tax Revenue	6.2	26.8	16.1	38.0	39.2	34.8	46.3	42.7	38.5	61.8
Total Unrestricted General Fund Revenue¹⁹	25.3	48.0	40.6	69.0	71.6	67.0	83.0	86.4	86.6	112.7
Petroleum Revenue	3.1	9.9	4.2	26.0	27.8	14.9	16.5	21.6	21.5	43.8
Non-Petroleum Revenue	22.2	38.1	36.4	43.0	43.8	52.1	66.5	64.8	65.1	68.9
Percent Petroleum of Total Unrestricted General Fund Revenue	12%	21%	10%	38%	39%	22%	20%	25%	25%	39%
Cumulative Unrestricted General Fund Revenue	25.3	73.3	113.9	182.9	254.5	321.5	404.4	490.8	577.4	690.1

(Table continued, next page; endnotes on last page of table)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

History

Fiscal Year	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Unrestricted General Fund Tax Revenue										
Petroleum Property Tax²	0.0	0.0	0.0	0.0	0.0	0.0	6.6	83.4	139.1	173.0
Excise Tax										
Alcoholic Beverages	3.9	4.4	4.9	4.8	5.2	5.7	6.6	7.8	8.0	7.6
Tobacco Products	1.0	1.0	1.1	1.2	1.2	1.3	1.5	1.7	1.8	1.7
Insurance Premium ³	2.2	2.6	3.0	3.5	3.7	3.8	4.4	6.1	8.1	10.0
Electric and Telephone Cooperative ⁴	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.9	1.2	1.5
Motor Fuel Tax ⁵	9.1	10.4	11.0	11.4	12.4	13.8	18.0	24.4	20.6	23.3
Vehicle Rental Tax ⁶	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tire Fee	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marijuana ⁷	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excise Tax	16.6	18.7	20.4	21.4	23.1	25.1	31.2	41.0	39.7	44.1
Income Tax										
General Corporate	4.2	4.9	5.2	5.3	6.0	7.0	14.9	26.2	30.8	25.1
Petroleum Corporate ⁸	0.1	0.4	0.9	1.2	0.9	1.2	2.5	4.9	5.0	8.4
Individual and Fiduciary	25.2	32.5	35.5	39.1	43.4	49.2	87.0	146.3	210.5	145.8
Total Income Tax	29.5	37.8	41.6	45.6	50.3	57.4	104.4	177.4	246.3	179.3
Oil and Gas Production										
Oil and Gas Production Tax	5.6	7.9	10.5	11.4	12.0	14.8	26.6	27.9	23.7	107.6
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Oil and Gas Hazardous Release	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Oil and Gas Production	5.6	7.9	10.5	11.4	12.0	14.8	26.6	28.0	23.8	107.7
Fish Tax										
Fisheries Business Tax ⁹	2.8	2.5	4.0	3.3	2.5	2.8	2.7	3.1	6.2	8.3
Fishery Resource Landing Tax ⁹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹⁰	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Fish Tax	2.8	2.5	4.0	3.3	2.5	2.8	2.7	3.1	6.2	8.3
Other Tax										
Estate	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Mining	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charitable Gaming	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Business License Tax	4.2	5.1	5.6	6.1	6.7	7.5	11.2	19.1	23.3	21.7
Large Passenger Vessel Gambling ¹¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹²	2.6	2.2	1.6	1.5	1.6	1.9	3.0	227.6	274.3	3.6
Total Other Tax	6.8	7.3	7.2	7.6	8.4	9.6	14.2	246.8	297.7	25.5
Total Unrestricted General Fund Tax Revenue	61.3	74.2	83.7	89.3	96.2	109.7	185.8	579.7	752.8	537.9

(Table continued, next page)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Unrestricted General Fund Non-Tax Revenue										
Licenses and Permits ¹³	7.3	8.4	8.7	9.1	9.8	10.9	13.6	16.4	16.1	19.1
Intergovernmental Receipts										
Federal Shared Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges for Services	8.4	9.2	11.0	13.7	17.4	17.8	20.2	22.4	24.8	24.9
Fines and Forfeitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rents and Royalties										
Oil and Gas Royalties ¹⁴	24.7	27.5	32.6	30.1	27.8	35.8	49.8	48.4	36.3	150.6
Oil and Gas Bonuses, Rents, Interest ^{14, 15}	4.1	903.1	3.2	5.5	9.5	28.4	4.9	3.7	2.8	1.8
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹⁶	2.1	2.3	2.4	2.9	3.1	2.7	13.4	3.6	2.9	5.0
Total Rents and Royalties	30.9	932.9	38.1	38.5	40.4	66.9	68.1	55.7	42.0	157.4
Investment Earnings¹⁷	2.7	39.8	78.4	67.3	43.2	41.1	38.5	31.7	34.8	44.2
Miscellaneous Revenue¹⁸	1.7	2.7	0.7	1.2	1.2	8.5	7.4	3.9	3.9	3.9
Total Unrestricted General Fund Non-Tax Revenue	51.1	993.0	136.9	129.8	112.0	145.2	147.8	130.1	121.6	249.5
Total Unrestricted General Fund Revenue¹⁹	112.4	1,067.3	220.5	219.1	208.2	254.9	333.5	709.9	874.4	787.4
Petroleum Revenue	34.5	938.9	47.1	48.3	50.2	80.2	90.4	391.5	477.6	441.5
Non-Petroleum Revenue	77.9	128.4	173.4	170.8	158.0	174.7	243.1	318.4	396.8	345.9
Percent Petroleum of Total Unrestricted General Fund Revenue	31%	88%	21%	22%	24%	31%	27%	55%	55%	56%
Cumulative Unrestricted General Fund Revenue	802.5	1,869.8	2,090.3	2,309.4	2,517.6	2,772.5	3,106.0	3,815.9	4,690.3	5,477.7

(Table continued, next page; endnotes on last page of table)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Unrestricted General Fund Tax Revenue										
Petroleum Property Tax²	163.4	168.9	143.0	142.7	152.6	131.0	128.4	113.5	102.5	96.2
Excise Tax										
Alcoholic Beverages	7.4	7.4	8.3	9.0	10.4	13.0	13.9	13.3	12.6	12.1
Tobacco Products	1.7	1.6	1.7	1.9	2.0	2.0	2.0	4.9	6.6	6.1
Insurance Premium ³	10.8	10.4	10.6	12.5	13.8	16.2	17.5	21.1	23.7	23.7
Electric and Telephone Cooperative ⁴	1.7	2.0	1.1	1.2	1.4	1.6	1.8	1.9	2.0	0.1
Motor Fuel Tax ⁵	22.3	26.1	23.2	30.3	36.7	32.2	36.0	36.1	32.2	33.6
Vehicle Rental Tax ⁶	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tire Fee	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marijuana ⁷	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excise Tax	43.9	47.5	44.9	54.9	64.3	65.0	71.2	77.3	77.1	75.6
Income Tax										
General Corporate	24.8	17.9	34.8	34.8	30.3	39.5	36.0	11.2	20.5	23.4
Petroleum Corporate ⁸	232.6	547.5	860.1	668.9	236.0	265.1	168.6	133.9	120.4	158.0
Individual and Fiduciary	117.3	100.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Income Tax	374.7	666.0	894.9	703.7	266.3	304.6	204.6	145.1	140.9	181.4
Oil and Gas Production										
Oil and Gas Production Tax	173.6	506.2	1,169.9	1,581.1	1,493.0	1,392.4	1,388.7	1,107.4	647.3	816.4
Oil and Gas Conservation	0.2	0.3	0.3	0.6	0.7	0.7	0.7	0.5	1.2	2.3
Oil and Gas Hazardous Release	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Oil and Gas Production	173.8	506.5	1,170.2	1,581.7	1,493.7	1,393.1	1,389.4	1,107.9	648.5	818.7
Fish Tax										
Fisheries Business Tax ⁹	11.9	14.6	20.7	22.8	20.5	19.0	18.7	21.1	26.5	22.5
Fishery Resource Landing Tax ⁹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹⁰	0.0	0.0	0.0	2.4	3.5	3.3	3.6	5.4	5.8	8.5
Total Fish Tax	11.9	14.6	20.7	25.2	24.0	22.3	22.3	26.5	32.3	31.0
Other Tax										
Estate	0.1	0.2	0.5	0.3	0.7	0.7	0.5	0.7	1.1	0.3
Mining	0.0	0.0	0.0	0.2	0.2	0.4	0.3	0.3	0.3	0.4
Charitable Gaming	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Business License Tax	28.2	4.2	5.4	5.5	6.9	19.9	38.8	2.1	1.5	1.4
Large Passenger Vessel Gambling ¹¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹²	4.6	4.4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Other Tax	32.9	8.8	8.9	6.0	7.8	21.0	39.6	3.1	2.9	2.1
Total Unrestricted General Fund Tax Revenue	800.6	1,412.3	2,282.6	2,514.2	2,008.7	1,937.0	1,855.5	1,473.4	1,004.2	1,205.0

(Table continued, next page)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Unrestricted General Fund Non-Tax Revenue										
Licenses and Permits ¹³	19.8	18.8	21.3	23.8	25.7	26.7	28.9	29.3	29.2	28.3
Intergovernmental Receipts										
Federal Shared Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges for Services	28.0	30.8	36.2	44.0	47.4	46.7	52.6	48.2	47.0	39.8
Fines and Forfeitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rents and Royalties										
Oil and Gas Royalties ¹⁴	250.2	689.4	1,119.7	1,174.4	1,105.6	1,058.5	1,042.2	845.0	448.3	701.5
Oil and Gas Bonuses, Rents, Interest ^{14,15}	1.6	344.2	11.3	7.1	38.7	13.9	14.9	38.9	4.3	11.3
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	418.2	70.5	163.9
Other ¹⁶	12.0	10.5	13.8	12.4	18.2	15.1	15.6	13.8	17.1	5.4
Total Rents and Royalties	263.8	1,044.1	1,144.8	1,193.9	1,162.5	1,087.5	1,072.7	1,315.9	540.2	882.1
Investment Earnings¹⁷	59.2	119.9	227.8	324.7	375.8	282.7	233.5	195.2	161.9	132.6
Miscellaneous Revenue¹⁸	7.2	6.7	5.5	7.8	10.9	9.5	16.8	13.0	16.9	16.1
Total Unrestricted General Fund Non-Tax Revenue	378.0	1,220.3	1,435.6	1,594.2	1,622.3	1,453.1	1,404.5	1,601.6	795.2	1,098.9
Total Unrestricted General Fund Revenue¹⁹	1,178.6	2,632.6	3,718.2	4,108.4	3,631.0	3,390.1	3,260.0	3,075.0	1,799.4	2,303.9
Petroleum Revenue	821.6	2,256.5	3,304.3	3,574.8	3,026.6	2,861.6	2,743.5	2,657.4	1,394.5	1,949.6
Non-Petroleum Revenue	357.0	376.1	413.9	533.6	604.4	528.5	516.5	417.6	404.9	354.3
Percent Petroleum of Total Unrestricted General Fund Revenue	70%	86%	89%	87%	83%	84%	84%	86%	77%	85%
Cumulative Unrestricted General Fund Revenue	6,656.3	9,288.9	13,007.1	17,115.5	20,746.5	24,136.6	27,396.6	30,471.6	32,271.0	34,574.9

(Table continued, next page; endnotes on last page of table)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Unrestricted General Fund Tax Revenue										
Petroleum Property Tax²	89.7	89.8	85.0	69.0	66.9	61.5	57.3	56.0	53.6	51.3
Excise Tax										
Alcoholic Beverages	11.8	12.0	12.2	12.0	11.9	12.0	12.0	12.0	11.6	11.8
Tobacco Products	6.4	11.0	14.0	14.3	14.0	14.1	14.4	14.2	13.7	15.4
Insurance Premium ³	19.4	22.7	24.4	25.5	26.3	26.1	28.0	28.2	28.4	33.7
Electric and Telephone Cooperative ⁴	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Motor Fuel Tax ⁵	37.3	41.5	39.8	43.3	40.7	40.4	39.5	37.5	35.2	35.5
Vehicle Rental Tax ⁶	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tire Fee	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marijuana ⁷	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excise Tax	75.0	87.3	90.4	95.1	92.9	92.6	93.9	91.9	89.0	96.5
Income Tax										
General Corporate	38.0	45.3	37.9	33.7	37.6	44.3	67.0	53.3	48.4	53.4
Petroleum Corporate ⁸	166.0	117.2	185.1	165.5	117.6	17.8	128.5	173.7	269.4	200.1
Individual and Fiduciary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Income Tax	204.0	162.5	223.0	199.2	155.2	62.1	195.5	227.0	317.8	253.5
Oil and Gas Production										
Oil and Gas Production Tax	696.4	972.3	1,253.8	1,022.2	989.4	662.8	769.8	771.7	907.0	564.4
Oil and Gas Conservation	2.4	2.4	2.3	2.3	2.1	2.3	2.0	1.8	1.7	1.6
Oil and Gas Hazardous Release	0.0	26.9	28.0	28.7	26.1	27.0	22.1	13.7	12.9	11.8
Total Oil and Gas Production	698.8	1,001.6	1,284.1	1,053.2	1,017.6	692.1	793.9	787.2	921.6	577.8
Fish Tax										
Fisheries Business Tax ⁹	26.7	25.1	31.1	30.1	42.2	33.9	39.0	38.2	31.0	28.5
Fishery Resource Landing Tax ⁹	0.0	0.0	0.0	0.0	0.0	0.1	7.3	7.1	8.3	3.8
Other ¹⁰	12.8	9.8	9.5	7.0	10.4	10.8	13.6	13.8	10.8	9.9
Total Fish Tax	39.5	34.9	40.6	37.1	52.6	44.8	59.9	59.1	50.1	42.2
Other Tax										
Estate	0.7	1.1	3.3	1.0	0.9	1.6	1.2	1.7	1.7	5.5
Mining	0.5	0.9	0.6	0.5	0.4	0.2	0.3	0.5	0.4	1.7
Charitable Gaming	0.6	1.6	1.5	1.5	1.4	1.7	2.0	1.9	1.9	2.1
Business License Tax	1.0	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0
Large Passenger Vessel Gambling ¹¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹²	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Other Tax	2.8	3.7	5.4	3.0	2.8	3.7	3.5	4.1	4.0	9.3
Total Unrestricted General Fund Tax Revenue	1,109.8	1,379.8	1,728.5	1,456.6	1,388.0	956.8	1,204.0	1,225.3	1,436.1	1,030.6

(Table continued, next page)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Unrestricted General Fund Non-Tax Revenue										
Licenses and Permits ¹³	28.3	27.8	29.1	32.4	32.7	35.7	34.7	60.9	69.0	74.6
Intergovernmental Receipts										
Federal Shared Revenue	0.0	0.0	0.0	0.0	0.2	0.2	0.6	1.0	2.0	2.2
Charges for Services	43.6	46.2	57.2	86.4	55.1	58.4	59.6	75.4	78.1	72.0
Fines and Forfeitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	8.2	37.7
Rents and Royalties										
Oil and Gas Royalties ¹⁴	611.5	753.7	958.7	708.2	716.7	516.1	631.8	642.2	759.2	480.4
Oil and Gas Bonuses, Rents, Interest ^{14,15}	16.7	4.2	24.7	6.8	44.3	5.1	5.0	5.7	6.4	23.0
Petroleum Special Settlements	257.7	154.8	33.5	4.7	4.7	0.1	0.7	0.0	0.0	0.0
Other ¹⁶	5.9	9.9	12.9	2.2	4.6	9.4	22.4	10.7	11.5	8.9
Total Rents and Royalties	891.8	922.6	1,029.8	721.9	770.3	530.7	659.9	658.6	777.1	512.3
Investment Earnings¹⁷	100.7	117.9	125.0	101.8	70.9	31.7	72.4	64.1	77.1	60.6
Miscellaneous Revenue¹⁸	10.0	10.9	14.9	61.4	45.0	36.2	49.2	35.8	44.6	33.5
Total Unrestricted General Fund Non-Tax Revenue	1,074.4	1,125.4	1,256.0	1,003.9	974.2	692.9	876.4	905.2	1,056.1	792.9
Total Unrestricted General Fund Revenue¹⁹	2,184.2	2,505.2	2,984.5	2,460.5	2,362.2	1,649.7	2,080.4	2,130.5	2,492.2	1,823.5
Petroleum Revenue	1,840.4	2,121.3	2,571.1	2,007.4	1,967.8	1,292.7	1,617.2	1,664.8	2,010.2	1,332.6
Non-Petroleum Revenue	343.8	383.9	413.4	453.1	394.4	357.0	463.2	465.7	482.0	490.9
Percent Petroleum of Total Unrestricted General Fund Revenue	84%	85%	86%	82%	83%	78%	78%	78%	81%	73%
Cumulative Unrestricted General Fund Revenue	36,759.1	39,264.3	42,248.8	44,709.3	47,071.5	48,721.2	50,801.6	52,932.1	55,424.3	57,247.8

(Table continued, next page; endnotes on last page of table)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Unrestricted General Fund Tax Revenue										
Petroleum Property Tax²	48.8	45.0	45.1	49.6	48.7	47.3	42.5	54.5	65.6	81.5
Excise Tax										
Alcoholic Beverages	12.2	12.7	12.0	12.9	14.1	16.4	17.3	17.6	17.1	20.0
Tobacco Products	15.2	16.3	16.3	15.5	16.3	16.0	25.1	35.4	43.8	44.9
Insurance Premium ³	28.4	28.7	32.2	34.1	39.0	43.7	45.9	44.3	46.5	47.1
Electric and Telephone Cooperative ⁴	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Motor Fuel Tax ⁵	37.6	41.9	37.5	40.2	37.2	41.2	39.4	42.0	39.2	41.8
Vehicle Rental Tax ⁶	0.0	0.0	0.0	0.0	0.0	2.7	7.5	7.7	8.0	8.5
Tire Fee	0.0	0.0	0.0	0.0	0.0	0.8	1.6	1.6	1.5	1.5
Marijuana ⁷	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excise Tax	93.6	99.8	98.2	102.8	106.8	121.0	137.0	148.8	156.3	164.0
Income Tax										
General Corporate	53.8	56.3	59.5	53.4	47.7	39.6	61.8	138.0	176.9	182.7
Petroleum Corporate ⁸	145.1	162.7	338.1	178.4	151.1	298.8	524.0	661.1	594.4	605.8
Individual and Fiduciary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Income Tax	198.9	219.0	397.6	231.8	198.8	338.4	585.8	799.1	771.3	788.5
Oil and Gas Production										
Oil and Gas Production Tax	358.6	693.2	694.4	486.7	589.8	642.7	854.9	1,191.7	2,198.3	6,810.9
Oil and Gas Conservation	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Hazardous Release	11.1	9.5	9.4	9.6	9.2	9.2	8.3	7.8	10.1	11.7
Total Oil and Gas Production	371.1	702.7	703.8	496.3	599.0	651.9	863.2	1,199.5	2,208.4	6,822.6
Fish Tax										
Fisheries Business Tax ⁹	25.9	18.2	15.4	12.7	13.8	14.9	10.7	15.4	17.1	14.7
Fishery Resource Landing Tax ⁹	5.9	2.2	4.1	2.7	6.9	2.5	3.9	4.7	5.3	7.9
Other ¹⁰	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Fish Tax	41.0	20.4	19.5	15.4	20.7	17.4	14.6	20.1	22.4	22.6
Other Tax										
Estate	1.7	2.5	2.7	3.1	1.2	2.3	1.5	0.6	0.1	0.0
Mining	0.6	3.4	1.7	0.5	0.4	3.2	10.3	18.6	79.1	54.4
Charitable Gaming	2.2	2.3	2.4	2.5	2.6	2.4	2.5	2.4	2.5	2.7
Business License Tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Passenger Vessel Gambling ¹¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8
Other ¹²	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Other Tax	4.5	8.2	6.8	6.1	4.2	7.9	14.3	21.6	81.7	63.9
Total Unrestricted General Fund Tax Revenue	757.9	1,095.1	1,271.0	902.0	978.2	1,183.9	1,657.4	2,243.6	3,305.7	7,943.1

(Table continued, next page)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Unrestricted General Fund Non-Tax Revenue										
Licenses and Permits¹³	63.7	68.4	37.3	42.2	33.6	41.8	42.7	41.0	42.0	38.9
Intergovernmental Receipts										
Federal Shared Revenue	0.8	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges for Services	70.6	43.7	27.0	19.1	13.9	11.1	17.9	21.8	28.5	29.3
Fines and Forfeitures	12.5	46.2	33.6	6.6	7.0	16.0	9.4	8.5	7.8	8.9
Rents and Royalties										
Oil and Gas Royalties ¹⁴	322.6	727.8	781.0	575.7	825.7	1,042.8	1,401.1	1,772.2	1,583.8	2,420.6
Oil and Gas Bonuses, Rents, Interest ^{14,15}	25.6	4.1	18.3	20.1	14.6	13.3	18.8	11.9	29.2	25.5
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹⁶	10.9	9.7	10.9	9.3	6.2	7.8	9.3	8.8	11.8	14.6
Total Rents and Royalties	359.1	741.6	810.2	605.1	846.5	1,063.9	1,429.2	1,792.9	1,624.8	2,460.7
Investment Earnings¹⁷	46.5	48.1	67.6	43.1	59.0	9.7	24.7	53.3	140.1	227.9
Miscellaneous Revenue¹⁸	37.3	37.6	34.9	42.3	9.4	19.2	7.5	39.3	9.7	26.2
Total Unrestricted General Fund Non-Tax Revenue	590.5	986.6	1,010.9	758.4	969.4	1,161.7	1,531.4	1,956.8	1,852.9	2,791.9
Total Unrestricted General Fund Revenue¹⁹	1,348.4	2,081.7	2,281.9	1,660.4	1,947.6	2,345.6	3,188.8	4,200.4	5,158.6	10,735.0
Petroleum Revenue	913.2	1,642.3	1,886.3	1,320.1	1,639.1	2,054.1	2,849.6	3,699.2	4,481.4	9,956.0
Non-Petroleum Revenue	435.2	439.4	395.6	340.3	308.5	291.5	339.2	501.2	677.2	779.0
Percent Petroleum of Total Unrestricted General Fund Revenue	68%	79%	83%	80%	84%	88%	89%	88%	87%	93%
Cumulative Unrestricted General Fund Revenue	58,596.2	60,677.9	62,959.8	64,620.2	66,567.8	68,913.4	72,102.2	76,302.6	81,461.2	92,196.2

(Table continued, next page; endnotes on last page of table)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Unrestricted General Fund Tax Revenue										
Petroleum Property Tax²	111.2	118.8	110.7	111.2	99.3	128.1	125.2	111.7	120.4	121.6
Excise Tax										
Alcoholic Beverages	19.5	19.5	19.4	19.4	19.8	18.3	17.7	22.2	20.1	19.6
Tobacco Products	46.6	45.1	46.5	45.6	44.8	42.8	40.5	45.5	43.4	37.4
Insurance Premium ³	45.5	50.4	49.6	54.8	52.4	54.6	59.1	0.0	0.0	0.0
Electric and Telephone Cooperative ⁴	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Motor Fuel Tax ⁵	10.1	28.8	39.5	40.9	41.9	41.9	41.9	44.3	41.3	6.3
Vehicle Rental Tax ⁶	8.0	7.3	8.3	8.5	8.4	8.3	9.7	0.0	0.0	0.0
Tire Fee	1.5	1.4	1.5	1.4	1.4	1.3	1.5	1.5	1.4	1.4
Marijuana ⁷	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	5.4
Total Excise Tax	131.3	152.6	164.9	170.8	168.9	167.5	170.6	113.7	107.3	70.4
Income Tax										
General Corporate	120.9	81.9	157.7	98.5	112.5	99.9	136.2	90.2	86.5	119.6
Petroleum Corporate ⁸	492.2	446.1	542.1	568.8	434.6	307.6	94.8	-58.8	-59.4	67.9
Individual and Fiduciary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Income Tax	613.1	528.0	699.8	667.3	547.1	407.5	231.0	31.4	27.1	187.4
Oil and Gas Production										
Oil and Gas Production Tax	3,100.9	2,860.7	4,543.2	6,136.7	4,042.5	2,605.9	381.6	176.8	125.9	741.2
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Hazardous Release	11.1	10.3	9.7	9.4	7.8	8.8	8.1	9.2	8.6	8.7
Total Oil and Gas Production	3,112.0	2,871.0	4,552.9	6,146.1	4,050.3	2,614.7	389.7	186.0	134.5	749.9
Fish Tax										
Fisheries Business Tax ⁹	19.3	14.0	20.1	26.4	19.2	25.1	21.3	22.3	15.5	21.2
Fishery Resource Landing Tax ⁹	4.7	8.3	2.7	6.3	5.5	7.1	5.1	0.3	4.9	3.5
Other ¹⁰	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Fish Tax	24.0	22.3	22.8	32.7	24.7	32.2	26.4	22.6	20.3	24.7
Other Tax										
Estate	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining	15.5	29.7	49.0	40.7	46.7	23.3	38.6	10.7	41.4	46.9
Charitable Gaming	2.8	2.6	2.5	2.6	2.5	2.5	2.5	2.6	2.5	2.4
Business License Tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Passenger Vessel Gambling ¹¹	6.3	6.3	5.8	5.2	6.0	6.7	6.6	7.7	8.2	8.6
Other ¹²	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Other Tax	24.8	38.6	57.3	48.5	55.2	32.5	47.7	21.0	52.1	57.9
Total Unrestricted General Fund Tax Revenue	4,016.4	3,731.3	5,608.3	7,176.6	4,945.5	3,382.5	990.5	486.4	461.6	1,212.0

(Table continued, next page)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Millions of Dollars

Fiscal Year	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Unrestricted General Fund Non-Tax Revenue										
Licenses and Permits¹³	35.5	39.5	42.8	42.3	41.9	42.7	34.4	41.2	45.6	37.1
Intergovernmental Receipts										
Federal Shared Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges for Services	19.3	17.1	18.5	29.2	25.2	24.2	20.1	21.5	21.5	7.0
Fines and Forfeitures	10.5	10.4	7.0	10.9	15.8	11.3	11.5	11.4	13.2	12.5
Rents and Royalties										
Oil and Gas Royalties ¹⁴	1,451.2	1,469.0	1,821.3	2,022.8	1,748.4	1,685.0	1,052.1	840.3	676.2	977.8
Oil and Gas Bonuses, Rents, Interest ^{14,15}	14.4	8.0	22.0	8.9	19.4	27.4	26.1	30.3	5.3	24.5
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹⁶	15.6	13.2	17.6	20.4	24.7	34.5	36.3	24.7	27.4	5.8
Total Rents and Royalties	1,481.2	1,490.2	1,860.9	2,052.1	1,792.5	1,746.9	1,114.5	895.3	708.9	1,008.1
Investment Earnings¹⁷	247.8	184.0	96.3	107.8	28.1	130.2	47.9	22.5	17.3	16.3
Miscellaneous Revenue¹⁸	27.0	40.8	39.1	66.3	79.5	52.3	37.5	54.4	86.5	131.2
Total Unrestricted General Fund Non-Tax Revenue	1,821.1	1,782.0	2,064.6	2,308.6	1,983.0	2,007.6	1,265.8	1,046.3	893.0	1,212.1
Total Unrestricted General Fund Revenue¹⁹	5,837.5	5,513.3	7,672.9	9,485.2	6,928.5	5,390.1	2,256.3	1,532.7	1,354.6	2,424.1
Petroleum Revenue	5,181.0	4,912.9	7,048.9	8,857.8	6,352.0	4,762.8	1,687.9	1,109.5	876.9	1,941.7
Non-Petroleum Revenue	656.5	600.4	624.0	627.4	576.5	627.3	568.4	423.2	477.7	482.4
Percent Petroleum of Total Unrestricted General Fund Revenue	89%	89%	92%	93%	92%	88%	75%	72%	65%	80%
Cumulative Unrestricted General Fund Revenue	98,033.7	103,547.0	111,219.9	120,705.1	127,633.6	133,023.7	135,280.0	136,812.7	138,167.3	140,591.4

(Endnotes, next page)

60 Years of Revenue

Unrestricted revenue detail,¹ 1959 – 2018 (Continued)

Endnotes

¹Unrestricted general fund revenue includes revenue that is not restricted by statute or custom, as reported elsewhere in this publication. In the years before fiscal year 2000, some revenue figures may include customarily restricted revenue. These include revenues in the following categories: licenses and permits, federal shared revenue, and charges for services and others.

²The petroleum property tax figure in the *Spring 1991 Revenue Sources Book* includes a \$28 million settlement with the City of Valdez. This table excludes that settlement.

³Starting in FY 2016, this revenue is deposited into a subfund of the general fund and is considered restricted.

⁴Prior to FY 1988, data are for general fund unrestricted revenue. This amount is higher than general purpose unrestricted revenue because the data include certain shared revenue.

⁵Prior to FY 1997, includes aviation fuel tax revenue shared with local municipalities.

⁶Starting in FY 2016, to be consistent with other budget documents, vehicle rental tax is now classified as designated general fund revenue.

⁷In November 2014, Alaska voters voted to legalize marijuana. The state's first collections from the marijuana excise tax were in FY 2017.

⁸The figure in the *Spring 1994 Revenue Sources Book* includes \$717.6 million in settlements to the Constitutional Budget Reserve Fund (CBRF). The figure in this table excludes these settlements.

⁹Prior to FY 2000, includes revenue shared with local municipalities.

¹⁰The Other Fish Tax category includes salmon enhancement tax, and the seafood and salmon marketing tax.

¹¹Large passenger vessel gambling tax revenue was originally incorrectly reported as designated restricted revenue for FY 2008 and FY 2009; this table correctly reports that revenue as unrestricted.

¹²The Other Tax category includes several taxes that are now repealed: the school tax, inheritance tax, non-petroleum property tax and others.

¹³Starting in FY 2016, to be consistent with other budget documents, revenue from alcoholic beverage licenses is now classified as designated general fund revenue.

¹⁴Net of Permanent Fund, Public School Trust Fund, and CBRF deposits.

¹⁵This category is primarily composed of petroleum revenue.

¹⁶Includes non-petroleum rents and royalties.

¹⁷Starting in FY 2001, interest earnings are included in oil and gas royalties, and excluded from investment earnings.

¹⁸Starting in FY 2010, dividends and payments from state-owned corporations are included in unrestricted miscellaneous revenue.

¹⁹Includes payments of \$22.4 million, \$45.6 million, and \$131.4 million for fiscal years 1978, 1979, and 1980, respectively, to the Alaska Native Fund under the Alaska Native Claims Settlement Act.

This page was intentionally left blank.

Restricted Revenue History

Restricted revenue detail, 1959 – 2018

Millions of Dollars

History

Fiscal Year	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Restricted Revenue Other Than from Taxes										
Federal Receipts	0.0	0.0	0.0	0.0	0.0	44.3	74.9	64.6	79.2	61.7
Investment Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ¹	0.4	0.8	2.7	3.0	4.2	4.5	6.1	8.2	9.9	11.7
Total Restricted Revenue Other Than from Taxes	0.4	0.8	2.7	3.0	4.2	48.8	81.1	72.9	89.1	73.4
Restricted Revenue from Taxes										
Petroleum Revenue	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
Excise Taxes ²	0.2	0.2	1.4	1.3	1.3	1.3	1.3	1.6	1.5	1.6
Fish Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income and Other Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Restricted Revenue from Taxes	0.2	0.2	1.4	1.3	1.4	1.4	1.4	1.7	1.6	1.8
Total Restricted Revenue in Above Categories	0.5	1.0	4.1	4.3	5.6	50.2	82.4	74.6	90.7	75.2

(Table continued, next page)

Restricted Revenue History

Restricted revenue detail, 1959 – 2018 *(Continued)*

Millions of Dollars

Fiscal Year	History									
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Restricted Revenue Other Than from Taxes										
Federal Receipts	73.4	76.5	111.2	124.7	136.5	N/A	172.4	220.7	211.5	238.6
Investment Revenue	0.0	0.0	0.0	0.0	0.0	N/A	0.0	0.0	0.0	1.8
Other ¹	12.6	16.6	2.0	2.7	2.9	N/A	15.3	14.6	10.6	9.2
Total Restricted Revenue Other Than from Taxes	86.1	93.1	113.2	127.4	139.4	N/A	187.7	235.3	222.1	249.6
Restricted Revenue from Taxes										
Petroleum Revenue	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	4.1	51.4
Excise Taxes ²	1.6	1.7	1.9	2.0	2.0	2.1	2.5	2.9	3.0	2.9
Fish Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income and Other Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Restricted Revenue from Taxes	2.0	2.0	1.9	2.0	2.0	2.1	2.5	2.9	7.1	54.3
Total Restricted Revenue in Above Categories	88.1	95.2	115.1	129.4	141.4	N/A	190.2	238.2	229.2	303.9

¹ As the definition of restricted revenue has changed over the years, this category is a catch-all for any restricted revenue that does not fit into the categories listed.

² The Restricted Excise Taxes category includes motor fuel tax (aviation only), tobacco (the School Fund and Cessation Fund), insurance premium tax (a portion of which became restricted starting in FY 2016), alcoholic beverage tax, and electric and telephone cooperative tax (the municipal share).

(Table continued, next page)

Restricted Revenue History

Restricted revenue detail, 1959 – 2018 *(Continued)*

Millions of Dollars

History

Fiscal Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Restricted Revenue Other Than from Taxes										
Federal Receipts	206.4	198.3	191.4	158.5	166.7	242.6	332.5	293.8	455.6	443.4
Investment Revenue	8.0	32.4	149.9	368.4	471.1	529.5	657.8	1,021.0	1,069.0	789.0
Other ¹	10.7	15.3	17.6	17.3	26.7	32.1	33.8	29.9	38.5	31.8
Total Restricted Revenue Other Than from Taxes	225.1	246.0	358.9	544.2	664.5	804.2	1,024.1	1,344.7	1,563.1	1,264.2
Restricted Revenue from Taxes										
Petroleum Revenue	85.6	351.7	1,292.8	1,208.5	830.4	675.2	680.5	346.6	183.8	425.5
Excise Taxes ²	2.8	2.7	2.8	3.1	3.3	3.4	3.2	2.8	3.2	4.7
Fish Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income and Other Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Restricted Revenue from Taxes	88.4	354.4	1,295.6	1,211.6	833.7	678.6	683.7	349.4	187.0	430.2
Total Restricted Revenue in Above Categories	313.5	600.4	1,654.5	1,755.8	1,498.2	1,482.8	1,707.8	1,694.1	1,750.1	1,694.4

(Table continued, next page)

Restricted Revenue History

Restricted revenue detail, 1959 – 2018 *(Continued)*

Millions of Dollars

History

Fiscal Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Restricted Revenue Other Than from Taxes										
Federal Receipts	490.6	510.8	549.7	638.3	N/A	N/A	N/A	995.2	1,093.3	1,022.8
Investment Revenue	868.0	916.0	1,036.0	1,055.0	1,283.0	1,159.0	1,135.0	1,925.0	3,316.0	3,804.0
Other ¹	56.1	69.8	51.4	58.4	N/A	N/A	N/A	1,476.8	213.9	437.2
Total Restricted Revenue Other Than from Taxes	1,414.7	1,496.6	1,637.1	1,751.7	N/A	N/A	N/A	4,397.0	4,623.2	5,264.0
Restricted Revenue from Taxes										
Petroleum Revenue	233.5	272.8	758.1	790.4	1,189.9	565.4	1,784.6	820.2	880.3	577.1
Excise Taxes ²	4.7	4.5	4.7	4.8	4.9	5.4	5.2	5.3	5.2	18.8
Fish Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income and Other Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Restricted Revenue from Taxes	238.2	277.4	762.8	795.2	1,194.8	570.8	1,789.8	825.5	885.5	595.9
Total Restricted Revenue in Above Categories	1,652.9	1,774.0	2,399.9	2,546.9	N/A	N/A	N/A	5,222.5	5,508.7	5,859.9

¹ As the definition of restricted revenue has changed over the years, this category is a catch-all for any restricted revenue that does not fit into the categories listed.

² The Restricted Excise Taxes category includes motor fuel tax (aviation only), tobacco (the School Fund and Cessation Fund), insurance premium tax (a portion of which became restricted starting in FY 2016), alcoholic beverage tax, and electric and telephone cooperative tax (the municipal share).

(Table continued, next page)

Restricted Revenue History

Restricted revenue detail, 1959 – 2018 *(Continued)*

Millions of Dollars

History

Fiscal Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Restricted Revenue Other Than from Taxes										
Federal Receipts	1,029.0	1,217.0	1,322.6	1,552.7	1,769.1	1,941.0	1,924.9	1,966.2	1,971.9	1,902.5
Investment Revenue	2,295.3	2,363.5	-682.8	-484.9	1,151.7	3,516.1	2,773.6	3,173.3	5,714.7	-1,483.6
Other ¹	544.4	592.8	375.7	430.1	468.3	367.9	456.6	444.6	579.0	464.9
Total Restricted Revenue Other Than from Taxes	3,868.7	4,173.3	1,015.5	1,497.9	3,389.1	5,825.0	5,155.1	5,584.1	8,265.6	883.8
Restricted Revenue from Taxes										
Petroleum Revenue	213.3	795.1	395.7	353.9	460.7	372.7	545.5	659.7	660.3	1,332.1
Excise Taxes ²	36.4	36.1	34.0	33.6	49.8	59.5	59.4	59.1	61.7	59.2
Fish Taxes	0.0	34.2	27.8	25.8	22.1	27.3	29.6	34.0	37.6	42.7
Income and Other Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	53.7
Total Restricted Revenue from Taxes	249.7	865.3	457.5	413.3	532.6	459.5	634.5	752.8	775.6	1,487.7
Total Restricted Revenue in Above Categories	4,118.4	5,038.6	1,473.0	1,911.2	3,921.7	6,284.5	5,789.6	6,336.9	9,041.2	2,371.5

(Table continued, next page)

Restricted Revenue History

Restricted revenue detail, 1959 – 2018 *(Continued)*

Millions of Dollars

History

Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Restricted Revenue Other Than from Taxes										
Federal Receipts	2,088.4	2,387.9	2,407.9	2,455.5	2,383.2	2,511.9	2,512.7	2,640.1	3,198.2	3,098.9
Investment Revenue	-6,894.5	4,292.0	7,928.6	141.3	4,977.8	7,927.7	2,603.4	556.0	6,832.8	5,616.4
Other ¹	390.4	330.9	337.6	328.4	354.7	326.4	376.7	472.9	504.7	503.8
Total Restricted Revenue Other Than from Taxes	-4,415.7	7,010.8	10,674.1	2,925.2	7,715.7	10,766.0	5,492.8	3,669.0	10,535.7	9,219.1
Restricted Revenue from Taxes										
Petroleum Revenue	888.2	1,281.2	1,041.2	1,027.2	1,216.9	970.4	671.4	517.8	823.7	508.0
Excise Taxes ²	56.4	54.9	56.0	56.0	54.3	55.4	56.1	122.1	127.5	119.7
Fish Taxes	45.7	37.0	47.2	54.8	53.6	57.4	46.4	45.4	45.4	53.6
Income and Other Taxes	52.7	44.2	32.0	16.4	17.2	18.4	17.2	19.1	18.4	20.9
Total Restricted Revenue from Taxes	1,043.0	1,417.3	1,176.4	1,154.4	1,342.0	1,101.6	791.1	704.4	1,015.2	702.2
Total Restricted Revenue in Above Categories	-3,372.7	8,428.1	11,850.5	4,079.6	9,057.7	11,867.6	6,283.9	4,373.4	11,550.8	9,921.3

¹ As the definition of restricted revenue has changed over the years, this category is a catch-all for any restricted revenue that does not fit into the categories listed.

² The Restricted Excise Taxes category includes motor fuel tax (aviation only), tobacco (the School Fund and Cessation Fund), insurance premium tax (a portion of which became restricted starting in FY 2016), alcoholic beverage tax, and electric and telephone cooperative tax (the municipal share).

60 Years of Petroleum

Revenue, Production, and Price, 1959 – 2018

Fiscal Year	History						
	1959	1960	1961	1962	1963	1964	1965
Petroleum Revenue (millions of dollars)							
Unrestricted	3.1	9.9	4.2	26.0	27.8	14.9	16.5
Restricted	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Unrestricted and Restricted	3.1	9.9	4.2	26.0	27.9	15.0	16.5
Cumulative ¹ Unrestricted	3.1	13.0	17.2	43.2	71.0	85.9	102.3
Total Cumulative ¹ Unrestricted and Restricted	3.1	13.0	17.2	43.2	71.1	86.0	102.6
Selected Petroleum Data							
Price per Barrel of Oil ²	2.1	1.9	1.8	1.8	1.8	1.8	1.8
Production (millions of barrels)	0.1	0.2	2.6	9.2	10.5	10.9	11.1
Total Alaska North Slope Wellhead Value (millions of dollars) ³	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cumulative ¹ Production (millions of barrels)	0.1	0.3	2.9	12.1	22.6	33.6	44.7
Cumulative ¹ Alaska North Slope Value (millions of dollars)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(Table continued, next page)

60 Years of PetroleumRevenue, Production, and Price, 1959 – 2018 *(Continued)*

History										
1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
21.6	21.5	43.8	34.5	938.9	47.1	48.3	50.2	80.2	90.4	391.5
0.1	0.1	0.2	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0
21.7	21.6	44.0	34.8	939.2	47.2	48.3	50.2	80.2	90.4	391.5
124.0	145.4	189.2	223.7	1,162.6	1,209.7	1,258.0	1,308.2	1,388.4	1,478.8	1,870.3
124.2	145.8	189.7	224.6	1,163.8	1,211.0	1,259.3	1,309.5	1,389.7	1,480.1	1,871.6
1.8	1.8	1.8	1.8	1.8	2.2	2.5	3.3	11.6	11.5	12.8
11.7	18.4	50.1	70.0	79.6	79.9	75.9	71.7	70.9	70.2	65.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56.3	74.7	124.8	194.8	274.4	354.3	430.2	501.8	572.7	643.0	708.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

¹ Cumulative beginning in FY 1959.

² The price prior to 1981 is Arabian Light, intended as an approximation for the Alaska North Slope (ANS) price.

³ The ANS Wellhead Value is not a product of Price and Production because wellhead value removes transportation costs, and because total production includes some Cook Inlet production.

(Table continued, next page)

60 Years of Petroleum

Revenue, Production, and Price, 1959 – 2018 *(Continued)*

Fiscal Year	History						
	1977	1978	1979	1980	1981	1982	1983
Petroleum Revenue (millions of dollars)							
Unrestricted	477.6	441.5	821.6	2,256.5	3,304.3	3,574.8	3,026.6
Restricted	4.1	51.4	85.6	351.7	1,292.8	1,208.5	830.4
Total Unrestricted and Restricted	481.7	492.9	907.2	2,608.2	4,597.1	4,783.3	3,857.0
Cumulative ¹ Unrestricted	2,347.9	2,789.4	3,611.0	5,867.5	9,171.8	12,746.6	15,773.2
Total Cumulative ¹ Unrestricted and Restricted	2,353.3	2,846.2	3,753.4	6,361.6	10,958.7	15,742.0	19,599.0
Selected Petroleum Data							
Price per Barrel of Oil ²	13.9	12.8	31.6	36.8	34.4	32.2	30.0
Production (millions of barrels)	64.7	339.4	482.8	571.8	585.7	603.0	621.1
Total Alaska North Slope Wellhead Value (millions of dollars) ³	0.0	1,652.1	2,563.9	7,404.7	11,366.0	12,129.0	11,276.2
Cumulative ¹ Production (millions of barrels)	773.3	1,112.7	1,595.5	2,167.3	2,753.0	3,356.0	3,977.1
Cumulative ¹ Alaska North Slope Value (millions of dollars)	0.0	1,652.1	4,215.9	11,620.6	22,986.6	35,115.6	46,391.8

(Table continued, next page)

60 Years of PetroleumRevenue, Production, and Price, 1959 – 2018 *(Continued)*

History										
1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
2,861.6	2,743.5	2,657.4	1,394.5	1,949.6	1,840.4	2,121.3	2,571.1	2,007.4	1,967.8	1,292.7
675.2	680.5	346.6	183.8	425.5	233.5	272.8	758.1	790.4	1,189.9	565.4
3,536.8	3,424.0	3,004.0	1,578.3	2,375.1	2,073.9	2,394.1	3,329.2	2,797.8	3,157.7	1,858.1
18,634.8	21,378.3	24,035.7	25,430.2	27,379.8	29,220.2	31,341.5	33,912.6	35,920.0	37,887.8	39,180.5
23,135.8	26,559.8	29,563.8	31,142.1	33,517.2	35,591.1	37,985.2	41,314.4	44,112.2	47,269.9	49,128.0
29.2	27.6	20.9	14.5	15.8	14.8	16.9	21.8	17.0	17.5	14.1
629.5	644.8	682.2	707.0	749.3	727.9	678.6	673.5	664.4	648.2	620.3
10,625.3	10,859.2	8,161.4	5,346.2	7,858.7	6,804.2	7,923.6	10,137.6	7,295.1	7,794.1	5,591.3
4,606.6	5,251.4	5,933.6	6,640.7	7,390.0	8,117.9	8,796.5	9,470.0	10,134.4	10,782.5	11,402.8
57,017.1	67,876.3	76,037.7	81,383.9	89,242.7	96,046.8	103,970.4	114,108.0	121,403.1	129,197.2	134,788.5

¹ Cumulative beginning in FY 1959.² The price prior to 1981 is Arabian Light, intended as an approximation for the Alaska North Slope (ANS) price.³ The ANS Wellhead Value is not a product of Price and Production because wellhead value removes transportation costs, and because total production includes some Cook Inlet production.*(Table continued, next page)*

60 Years of Petroleum

Revenue, Production, and Price, 1959 – 2018 *(Continued)*

Fiscal Year	History						
	1995	1996	1997	1998	1999	2000	2001
Petroleum Revenue (millions of dollars)							
Unrestricted	1,617.2	1,664.8	2,010.2	1,332.6	913.2	1,642.3	1,886.3
Restricted	1,784.6	820.2	880.3	577.1	213.3	795.1	395.7
Total Unrestricted and Restricted	3,401.8	2,485.0	2,890.5	1,909.7	1,126.5	2,437.4	2,282.0
Cumulative ¹ Unrestricted	40,797.7	42,462.5	44,472.7	45,805.3	46,718.5	48,360.8	50,247.1
Total Cumulative ¹ Unrestricted and Restricted	52,529.8	55,014.8	57,905.3	59,815.0	60,941.5	63,378.9	65,660.9
Selected Petroleum Data							
Price per Barrel of Oil ²	16.9	17.9	20.7	15.4	13.0	24.4	27.6
Production (millions of barrels)	599.0	558.5	512.4	469.9	420.2	377.7	369.7
Total Alaska North Slope Wellhead Value (millions of dollars) ³	6,598.0	6,807.0	8,347.6	5,404.8	3,565.0	7,161.1	8,265.6
Cumulative ¹ Production (millions of barrels)	12,001.8	12,560.3	13,072.6	13,542.5	13,962.7	14,340.4	14,710.1
Cumulative ¹ Alaska North Slope Value (millions of dollars)	141,386.5	148,193.5	156,541.1	161,945.8	165,510.8	172,671.9	180,937.5

(Table continued, next page)

60 Years of Petroleum

Revenue, Production, and Price, 1959 – 2018 *(Continued)*

History										
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1,320.1	1,639.1	2,054.1	2,849.6	3,699.2	4,481.4	9,956.0	5,181.0	4,912.9	7,048.9	8,857.8
353.9	460.7	372.7	545.5	659.7	660.3	1,332.1	888.2	1,281.2	1,041.2	1,027.2
1,674.0	2,099.8	2,426.8	3,395.1	4,358.9	5,141.7	11,288.1	6,069.2	6,194.1	8,090.1	9,885.0
51,567.2	53,206.3	55,260.4	58,110.0	61,809.2	66,290.6	76,246.6	81,427.6	86,340.5	93,389.4	102,247.2
67,334.9	69,434.7	71,861.5	75,256.6	79,615.5	84,757.2	96,045.3	102,114.5	108,308.6	116,398.7	126,283.8
21.7	28.6	32.4	44.8	62.1	61.6	96.5	68.3	74.9	94.5	112.7
380.2	371.0	365.6	340.0	313.2	273.9	266.9	256.5	237.8	222.7	216.0
6,298.3	8,352.1	9,522.7	12,910.7	16,956.4	14,918.7	23,703.9	15,666.0	16,391.8	19,230.0	22,112.0
15,090.4	15,461.3	15,826.9	16,167.0	16,480.1	16,754.0	17,020.9	17,277.5	17,515.3	17,738.0	17,954.0
187,235.8	195,587.9	205,110.6	218,021.4	234,977.7	249,896.4	273,600.4	289,266.4	305,658.2	324,888.2	347,000.2

¹ Cumulative beginning in FY 1959.

² The price prior to 1981 is Arabian Light, intended as an approximation for the Alaska North Slope (ANS) price.

³ The ANS Wellhead Value is not a product of Price and Production because wellhead value removes transportation costs, and because total production includes some Cook Inlet production.

(Table continued, next page)

60 Years of PetroleumRevenue, Production, and Price, 1959 – 2018 *(Continued)*

Fiscal Year	History					
	2013	2014	2015	2016	2017	2018
Petroleum Revenue (millions of dollars)						
Unrestricted	6,352.0	4,762.8	1,687.9	1,109.5	876.9	1,941.7
Restricted	1,216.9	970.4	671.4	517.8	823.2	508.0
Total Unrestricted and Restricted	7,568.9	5,733.2	2,359.3	1,627.3	1,700.1	2,449.7
Cumulative ¹ Unrestricted	108,599.2	113,362.0	115,049.9	116,159.4	117,035.8	118,977.5
Total Cumulative ¹ Unrestricted and Restricted	133,852.7	139,585.9	141,945.2	143,572.5	145,272.6	147,722.3
Selected Petroleum Data						
Price per Barrel of Oil ²	107.6	107.6	72.6	43.2	49.4	63.6
Production (millions of barrels)	198.5	199.5	189.5	194.4	197.3	194.9
Total Alaska North Slope Wellhead Value (millions of dollars) ³	18,979.9	18,806.4	11,488.6	6,272.9	7,633.4	8,741.2
Cumulative ¹ Production (millions of barrels)	18,152.5	18,352.0	18,541.5	18,735.9	18,933.2	19,128.1
Cumulative ¹ Alaska North Slope Value (millions of dollars)	365,980.1	384,786.4	396,275.0	402,547.9	410,181.3	418,922.6

¹Cumulative beginning in FY 1959.

²The price prior to 1981 is Arabian Light, intended as an approximation for the Alaska North Slope (ANS) price.

³The ANS Wellhead Value is not a product of Price and Production because wellhead value removes transportation costs, and because total production includes some Cook Inlet production.

This page was intentionally left blank.



Chapter 4

Petroleum Revenue

General Discussion

The four major sources of state revenue from oil and gas production are severance tax, royalties, property tax, and corporate income tax. This chapter describes each of these sources, discusses the methods used to create the forecast, and provides a forecast of each source.

Severance tax (often referred to as a production tax) is imposed on a producer when the resource is severed (or extracted) from land in Alaska. Royalties are payments to the owners of the land and represent a percentage of production. Property tax is collected as a percentage of the value of taxable oil and gas property. Corporate income tax is levied on oil and gas C-corporations as a percentage of their worldwide net income apportioned to Alaska.

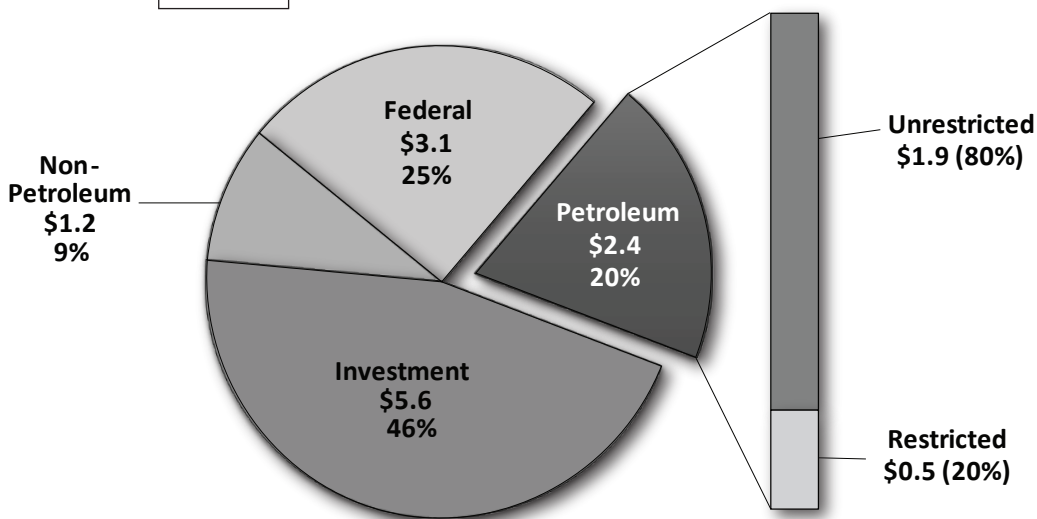
As shown in Figure 4-A, revenue from petroleum accounted for \$2.4 billion, or 20% of total state revenue in fiscal year 2018.

Most of the revenue from production tax, corporate income tax, and property tax is unrestricted, while a portion of royalty revenue is considered restricted revenue. The Alaska Constitution requires that 25% of royalty revenue be deposited into the Permanent Fund, and in FY 2019 only this constitutionally required portion of royalty was appropriated to the Permanent Fund per legislative action. However, AS 37.13.010(a) specifies that 50% of royalty revenue from certain mineral leases be deposited into the Permanent Fund, and in years in which the appropriation follows this statute, roughly 31% of oil and gas royalty revenue is deposited into the Permanent Fund. Additionally, the Public School Trust Fund receives 0.5% of royalty revenue.

Chapter 4
A

FY 2018 Petroleum Revenue

By restriction and type, in billions of dollars



Total Petroleum Revenue

By restriction and type

	Millions of Dollars			
	Fiscal Year	History	Forecast	
		2018	2019	2020
Unrestricted Petroleum Revenue				
Petroleum Property Tax	121.6	126.1	119.0	
Petroleum Corporate Income Tax	67.9	195.0	210.0	
Oil and Gas Production Tax	749.9	815.4	479.3	
Royalties (including Bonuses, Rents, and Interest)	1,002.3	1,074.6	880.5	
Total Unrestricted Petroleum Revenue	1,941.7	2,211.1	1,688.9	
Increase/Decrease from Prior Period	1,064.7	269.5	-522.2	
Percent Change from Prior Period	121%	14%	-24%	
Restricted Petroleum Revenue				
Other Restricted				
Royalties, Bonuses, and Rents to the Alaska Permanent Fund	356.1	363.8	388.2	
Royalties, Bonuses, and Rents to the Public School Trust Fund	7.0	7.2	6.4	
Tax Settlements to Constitutional Budget Reserve Fund	121.3	125.0	150.0	
Subtotal Other Restricted	484.4	496.1	544.6	
Federal				
NPR-A Royalties, Rents, and Bonuses	23.7	7.2	11.3	
Total Restricted Petroleum Revenue	508.0	503.3	555.9	
Increase/Decrease from Prior Period	-315.2	-4.8	52.6	
Percent Change from Prior Period	-38%	-1%	10%	
Total Petroleum Revenue	2,449.7	2,714.4	2,244.8	
Increase/Decrease from Prior Period	749.5	264.7	-469.6	
Percent Change from Prior Period	44%	11%	-17%	

The state also receives payments from the federal government representing a share of the bonuses, rents, and royalties derived from federal oil and gas leases in the National Petroleum Reserve – Alaska (NPR-A). These funds are deposited into a special NPR-A fund and are considered “federal revenue.”

The state periodically receives settlements from tax and royalty disputes between the state and taxpayers. These payments are deposited into the Constitutional Budget Reserve Fund (CBRF), after accounting for any applicable share of royalty settlements deposited into the Permanent Fund and Public School Trust Fund.

Table 4-1 shows both restricted and unrestricted petroleum revenue collected from each source in FY 2018 and forecasts for FY 2019 and FY 2020. Table 4-2

shows the 10-year forecast of unrestricted revenue from these sources.

Production Tax

Oil and natural gas produced and sold from lands within Alaska are subject to a severance tax as the resources leave the land. This severance tax is commonly referred to as the “production tax.” The production tax applies to oil and gas produced from any area within the boundaries of the state, including lands that are owned by the State of Alaska, the federal government (like NPR-A), or private parties, such as Native corporations. State ownership of submerged lands extends 3 miles from the shore. Production tax applies only to oil and gas that the producer sells, so it

Unrestricted Petroleum Revenue

FY 2018 and FY 2019 – FY 2028 forecast

Millions of Dollars

Fiscal Year	History		Forecast								
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Petroleum Property Tax	121.6	126.1	119.0	116.5	114.9	113.6	111.9	110.1	108.3	106.4	104.4
Petroleum Corporate Income Tax	67.9	195.0	210.0	210.0	215.0	220.0	220.0	230.0	240.0	240.0	240.0
Oil and Gas Production Tax ¹	749.9	815.4	479.3	520.8	476.6	466.4	458.0	433.2	503.1	606.7	744.6
Royalties-Net ²	1,002.3	1,074.6	880.5	870.6	850.6	842.0	831.0	845.1	877.7	901.4	935.4
Total Unrestricted Petroleum Revenue	1,941.7	2,211.1	1,688.9	1,717.8	1,657.1	1,642.0	1,620.8	1,618.4	1,729.2	1,854.6	2,024.3
Increase/Decrease from Prior Period	1,064.7	269.5	-522.2	29.0	-60.8	-15.0	-21.2	-2.4	110.7	125.4	169.7
Percent Change from Prior Period	121%	14%	-24%	2%	-4%	-1%	-1%	0%	7%	7%	9%

¹Includes hazardous release and conservation surcharge revenues.

²Includes bonuses, rents, and interest.

excludes state royalties, gas used in lease operations or flared for safety reasons, and any production that is re-injected into a reservoir.

In 2013, the Alaska Legislature passed Senate Bill 21, which is the existing production tax regime applicable to oil and gas production in the state, including North Slope oil production. Adjustments and refinements to the production tax system were made in both 2016 with House Bill 247, and in 2017 with House Bill 111. Table 4-3 lists the major provisions of the production tax as they exist in current law. The following narrative describes the current production tax system for various areas of the state and types of production.

North Slope

For North Slope oil and export gas, the tax uses the concept of "production tax value" (PTV), which is the gross value at the point of production minus lease expenditures. PTV is similar in concept to net profit, but different in that all lease expenditures can be deducted in the year incurred; that is, capital expenditures are not subject to a depreciation schedule. The production tax rate is 35% of PTV with an alternative minimum tax of 0% to 4% of gross value, with the 4% minimum tax applying when average ANS oil prices for the year exceed \$25 per barrel. Lower rates would

apply if the yearly average price is below \$25 per barrel.

Several tax credits and other mechanisms are available for North Slope oil production to incentivize additional investment. A Per-Taxable-Barrel Credit is available, which is progressively reduced from \$8 per barrel to \$0 as wellhead value increases from \$80 per barrel to \$150 per barrel. A company that chooses to take this credit may not use any other credits to reduce tax paid to below the gross minimum tax.

An additional incentive applies for qualifying new production areas on the North Slope. The so-called gross value reduction (GVR) allows a company to exclude 20% or 30% of the gross value for that production from the tax calculation. Qualifying production includes areas surrounding a currently producing area that may not be otherwise commercial to develop, as well as certain new oil pools. Oil that qualifies for this GVR receives a flat \$5 per-taxable-barrel credit rather than the sliding-scale credit available for most other North Slope production. As a further incentive, this \$5 per-taxable-barrel credit can be applied to reduce tax liability below the minimum tax. The GVR is only available for the first seven years of production, and ends early if ANS prices exceed \$70 per barrel for any three years. An estimate of

how much oil might be eligible for the GVR incentive is included in Table 4-7 in the production portion of this chapter.

Effective Jan. 1, 2022, for North Slope export gas, the tax rate will be 13% of the gross value at the point of production. Currently, only a very small amount of gas is technically export gas, which is sold for field operations in federal offshore leases. However, this tax rate would apply to a major gas export project. Senate Bill 138, passed in 2014, allows for the state to accept payment of this 13% gross tax as gas in-kind.

For the North Slope, a Net Operating Loss (NOL) Credit in the amount of 35% of losses was available until Dec. 31, 2017. It allowed a credit to be carried forward to offset a future tax liability, or, in some cases, to be transferred or repurchased by the state.

On Jan. 1, 2018, the NOL credit was replaced with a new carried-forward annual loss provision. In lieu of credits, a company may carry forward 100% of lease expenditures not applied against tax, and may apply all or part of lease expenditures in a future year. A carried-forward annual loss may not reduce tax below the minimum tax, and can only be used after the start of regular production from the area in which the expenditures were incurred. This provision is known as “ring fencing” of the loss. An unused carried-forward annual loss will reduce in value by one-tenth each year beginning in the eighth or 11th year after it is earned, depending on whether the carried-forward annual loss was earned from a producing or non-producing area.

Cook Inlet

Cook Inlet oil production is officially subject to the same tax rate of 35% of PTV. However, the tax is limited by statute to a maximum of \$1.00 per barrel.

For Cook Inlet gas production, the tax rate is 35% of PTV, and the tax is limited to a maximum value averaging 17.7 cents per 1,000 cubic feet. This rate also applies to North Slope gas used for qualifying in-state uses, commonly referred to as non-export gas.

Previously existing Cook Inlet tax incentives include the Qualified Capital Expenditure (QCE) Credit, the Well Lease Expenditure (WLE) Credit, and the Net Operating Loss (NOL) Credit. House Bill 247, passed in 2016, began the phase-out of these credits for Cook Inlet. On Jan. 1, 2017, the QCE credits were reduced from 20% to 10%, the WLE credits were reduced from 40% to 20%, and the NOL credits were reduced from 25% to 15%. Then all three credits for Cook Inlet were eliminated on Jan. 1, 2018.

Middle Earth

Areas outside the North Slope and Cook Inlet are commonly referred to as “Middle Earth.” Middle Earth currently has no production and a relatively small amount of exploration activity.

The QCE and WLE credits for Middle Earth were also reduced in 2017, but they remained in place beyond Jan. 1, 2018, at reduced rates (10% QCE and 20% WLE).

A 15% NOL credit for Middle Earth was eliminated Jan. 1, 2018; it was replaced with a carried-forward annual loss provision similar to the North Slope’s.

Should oil or gas be produced from Middle Earth, it would nominally be subject to the statewide tax rate of 35% of PTV. However, a tax ceiling of 4% of gross value would apply for the first seven years of production, provided production begins prior to Jan. 1, 2027.

Other Provisions

A Small-Producer Credit of up to \$12 million per company is available for certain companies statewide, but it is gradually being phased out. The credit expired on either Dec. 31, 2016, or the ninth calendar year after production started, if production started before May 1, 2016. New companies, therefore, are not eligible to take the credit.

For oil produced from private lands across the state, Alaska levies a production tax on the value of private landowner royalty interest, in the amount of 5% of gross value for oil and 1.667% for gas. Tax credits cannot be used to offset this portion of the tax.

The production tax includes several other nuances and provisions beyond the brief description provided here. For more information about the various tax credits, including a 10-year forecast, see Chapter 8.

Revenue from production tax is estimated on a company-specific basis by forecasting the components used in the tax calculation, then subtracting estimated tax credits. Under a net value tax regime, these components include the price of oil, cost of transportation, cost of production, and volume of production for each field.

Based on a number of assumptions, the Department of Revenue develops reasonable estimates for how the components of the production tax calculation might behave in the future. There is a high degree of uncertainty in forecasting the components, and

Production Tax: Overview of Current Law

Key provisions under Senate Bill 21¹

North Slope

Provision	Current Law
Base Tax Rate (applied to Production Tax Value)	35%
Minimum Tax Floor (applied to Gross Value at Point of Production)	Up to 4%. 4% rate applies when the Alaska North Slope price is more than \$25/barrel. Some credits can apply against minimum.
Gross Value Reduction	20% or 30% of gross value excluded from the tax calculation; limited to first seven years of production; benefit ends early if the average ANS price exceeds \$70 for any three years.
Per-Taxable-Barrel Credit for Non-GVR Production	Sliding scale \$0/barrel to \$8/barrel. \$8 credit applies when wellhead price is less than \$80/barrel. Cannot apply against the minimum tax.
Per-Taxable-Barrel Credit for GVR Production	\$5/barrel, no sliding scale. Can apply against minimum tax.
True-Up of Per-Taxable-Barrel Credit	Unused Per-Taxable-Barrel Credits can be used to offset tax liability in other months of the calendar year.
Net Operating Loss Credit	Repealed Jan. 1, 2018.
Lease Expenditures Carryforward	Beginning Jan. 1, 2018, a company may carry forward lease expenditures not deducted against tax, and may apply in a future year to reduce liability to minimum tax, contingent on the production from the area earned. Carryforwards reduce in value by one-tenth each year beginning in the eighth or 11th year after earned.

Cook Inlet

Provision	Current Law
Base Tax Rate (applied to PTV)	35%
Tax Ceiling – Oil	\$1/barrel, permanent tax ceiling.
Tax Ceiling – Gas	Average 17.7 cents/thousand cubic feet (mcf), permanent tax ceiling.
Qualified Capital Expenditure Credit	Repealed Jan. 1, 2018.
Well Lease Expenditure Credit	Repealed Jan. 1, 2018.
Net Operating Loss Credit	Repealed Jan. 1, 2018.

Production Tax: Overview of Current Law

Key provisions under Senate Bill 21¹

Middle Earth

Provision	Current Law
Base Tax Rate (applied to PTV)	35%.
Tax Ceiling	4% of gross value for the first seven years of production if production begins before 2027.
Capital, Well Lease, Expenditure Credits	Credits maintained at 2017 rates (10% QCE, 20% WLE).
Net Operating Loss Credit	Repealed Jan. 1, 2018.
Lease Expenditures Carryforward	Beginning Jan. 1, 2018, a company may carry forward lease expenditures not deducted against tax, and may apply in a future year to reduce liability to minimum tax, contingent on production from the area earned. Carryforwards reduce in value by one-tenth each year beginning in the eighth or 11th year after earned.
Exploration Tax Credits	30% or 40% for qualifying exploration, expires Jan. 1, 2022, does not apply to seismic after Jan. 1, 2018. Credits can be applied against a company's own corporate tax liability.

Statewide/Other

Provision	Current Law
Tax Ceiling for "Gas Used in State"	Qualifying gas is taxed at Cook Inlet rate, permanent tax ceiling.
Interest Rate on Delinquent Taxes	5.25% above the Federal Reserve discount rate, compounded quarterly, for all tax types.
Credits for Tax-Exempt Entities	Credits earned only for lease expenditures subject to tax.
Small-Producer Credits	Up to \$12 million per company for first nine years of production, can apply against minimum tax; must begin production before May 1, 2016.
Retroactive Use of Credits	Tax credit certificates (including transferred) may be used to offset a liability or assessment for prior-year taxes.
Production Limit for Refunded Credit Eligibility	Companies with more than 50,000 barrels of oil-equivalent production not eligible for state repurchase of credits.
Alaska-Hire Preference for Tax Credits	Department of Revenue must give credit purchase priority based on ranking of Alaska-hire percentage, including contractors.
Per-Company Limit for Refunded Credits	\$70 million per company per year. First \$35 million at full value; next \$35 million may be purchased at 75% of value at company option.
Phase-Out of Oil and Gas Tax Credit Fund	No eligibility for state purchase for any credits earned after July 1, 2017, except for refinery and LNG storage credits to be purchased by direct appropriation.

¹Current law reflects Senate Bill 21 provisions after changes made in 2016 with House Bill 247, and changes made in 2017 with HB 111.

Chapter 4
4

ANS Oil and Gas Production Tax

Data summary

Fiscal Year	History	Forecast	
	2018	2019	2020
North Slope Price (dollars per barrel)			
ANS West Coast	63.61	67.96	64.00
Transit Costs and Other	9.52	8.53	8.64
ANS Wellhead	54.09	59.43	55.36
North Slope Production (thousand barrels per day)			
Total ANS Production	518.4	526.8	533.2
Royalty and Federal ¹	62.2	61.9	60.2
Taxable Barrels	456.2	464.9	473.0
North Slope Lease Expenditures^{2,3} (millions of dollars)			
Total North Slope Lease Expenditures			
Operating Expenditures (OPEX)	2,649.2	2,715.3	2,823.2
Capital Expenditures (CAPEX)	1,729.4	1,900.6	2,604.4
Total North Slope Expenditures	4,378.6	4,615.8	5,427.6
Deductible North Slope Lease Expenditures			
Operating Expenditures (OPEX)	2,581.0	2,640.9	2,702.8
Capital Expenditures (CAPEX)	1,485.1	1,635.5	2,034.7
Deductible North Slope Lease Expenditures	4,066.1	4,276.4	4,737.5
State Production Tax Revenue⁴			
Tax Revenue (millions of dollars)	749.9	815.4	479.3
Production Tax Collected per Taxable Barrel (dollars per barrel)	4.5	4.8	2.8
Statewide Production Tax Credits^{2,5} (millions of dollars)			
Credits Used Against Tax Liability	1,092.6	1,360.0	1,228.0
Credits for Potential Purchase	75.4	102.8	732.0

¹ Royalty and Federal barrels represent the Department of Revenue's best estimate of barrels that are not taxed. This estimate includes both state and federal royalty barrels, and barrels produced from federal offshore property.

² Lease expenditures and credits used against tax liability for FY 2018 were prepared using unaudited company-reported estimates.

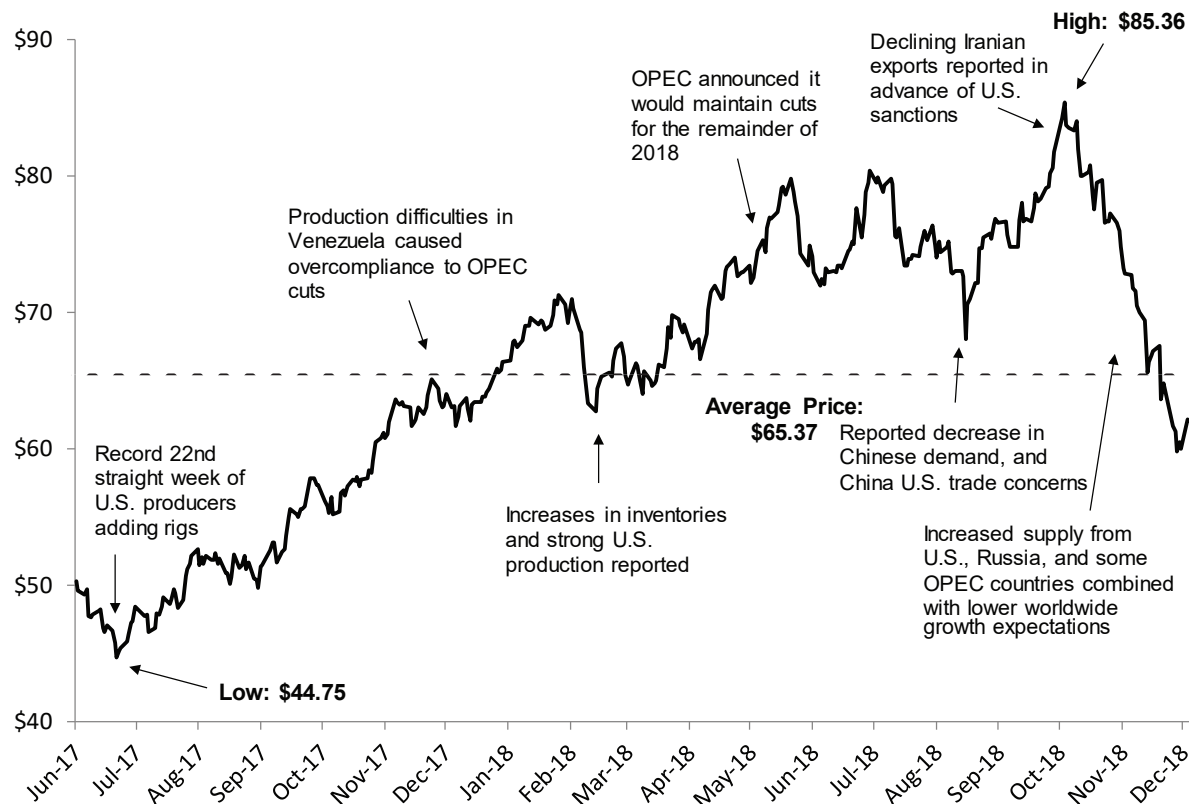
³ Expenditure data for FY 2019 and FY 2020 are compiled from company-submitted expenditure forecast estimates and other documentation as provided to the department. Expenditures are shown here in two ways: (1) total estimated expenditures including for those companies with no tax liability; and (2) estimated deductible expenditures for only those companies with a tax liability.

⁴ Production tax is calculated on a company-specific basis, therefore the aggregated data reported here will not generate the total tax revenue shown. For an illustration of the tax calculation, see Appendix Tables E-1, E-2, and E-3.

⁵ Production tax credits shown include all production tax credits and all areas of the state. Assumptions for the Small-Producer Credit are included in the table. Per-Taxable-Barrel Credits for oil not eligible for the gross value reduction may not reduce a producer's liability below the minimum tax; that limitation is reflected in these estimates.

Alaska North Slope Crude West Coast Price

Paired with associated market events



small deviations from the forecast values in any one component can result in large variations in total revenue. What follows is a description of each component and the method used to forecast that component. These component forecasts are used to develop the forecast of revenue from oil and gas production tax for the next 10 years as seen in Table 4-2. Various tax credits that are subtracted in arriving at this calculation, as well as estimates of additional tax credits eligible to be purchased by the state, are discussed in Chapter 8.

Crude Oil Prices

The future price of crude oil is the most sensitive variable in the revenue forecast and is also the most prone to uncertainty. As a price-taker in the global market, Alaska cannot exert any significant pressure on the future price of oil by altering its level of production. Rather, oil prices are determined on a global basis, reflecting fluctuations in supply and demand.

A 10-year forecast of Alaska North Slope (ANS) oil prices, along with the inferred wellhead values, can be

found in Table 4-5. Appendix B includes a 10-year history and a 10-year forecast of these values in nominal and real terms, as well as comparisons to the spring 2018 forecast.

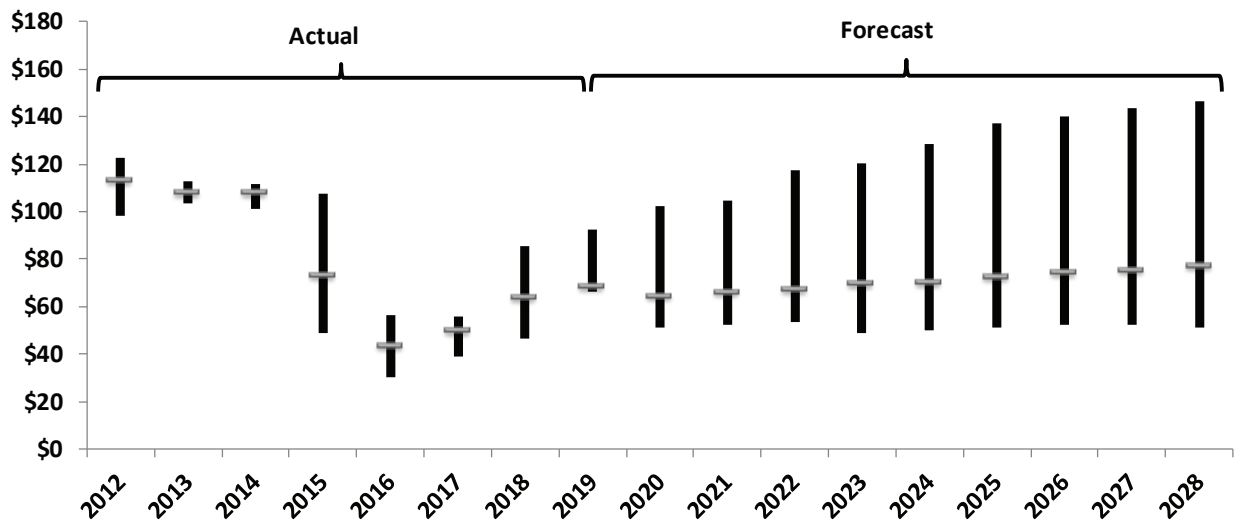
Several major factors contribute to the pricing of oil on the world market, including but not limited to: 1) inventory levels, 2) infrastructure, 3) geopolitics, 4) natural disasters, 5) supply disruptions, 6) action by the Organization of Petroleum Exporting Countries (OPEC), 7) macroeconomic events, and 8) financial market trends and speculation. Figure 4-B shows oil prices in recent months and associated key market events.

Each of these factors influences the price of oil and all have been encountered within the last 10-year period. Without knowledge of when and if these sort of events will occur, it is not possible to forecast a particular path for oil prices with any certainty. Furthermore, the market is dynamic and the impact of the same event can bring about different outcomes at different times.

In the longer term, fundamental economic factors of supply and demand drive oil prices. Ultimately, predicting future price requires an understanding of

ANS West Coast Price, History and Forecast

Actual price fluctuation and official fall 2018 forecast spread



demand growth and the available future supply of petroleum products.

Forecast Methods

One of the major components in developing the official price forecast is a day-long price forecasting session hosted by the Department of Revenue, usually held in early October. The forecast session uses a survey method that relies on a pool of participants from state government, the private sector, and academia. Each participant submits his or her own price forecasts after a day of presentations by experts on oil price markets and market structure. These forecasts are used to calibrate internal models and inform discussions on how effects that occur after the price forecasting session should affect the price forecast.

ANS prices are forecast in real 2018 dollars. These prices are converted to nominal (inflation-adjusted) oil prices using the current Callan Associates, Inc. inflation assumption of 2.25%.

Using the results of the oil price forecasting session, analyst outlooks, futures market analysis, and comparison to past ANS forecasts, the department develops a view on possible future ANS prices. This view is then adapted into the ANS price forecast.

Price Forecast

Many factors help determine the path of future of oil prices, and over the short term, prices can be highly volatile. Over the long term, however, oil prices are

generally expected to be responsive to the fundamental factors of supply and demand.

Underlying the oil price forecast is an assumption of continued long-term growth in world oil consumption. Vehicle efficiency gains in the developed world are expected to be more than offset by increased vehicle use and petrochemical use in the developing world, as well as increases in global aviation. Meanwhile, major oil producers are employing increased capital discipline and react when an oil price sufficient to spur new investment signals the need to bring on new oil supplies to meet growing demand.

The oil prices for the forecast are formed based on input from the fall price forecasting session. The current price forecast for ANS oil prices can be found in Figure 4-C.

The Department of Revenue projects nominal ANS oil prices will average \$67.96 per barrel in FY 2019 and \$64.00 in FY 2020. The department now expects oil prices to stabilize around \$63 per barrel in real terms by FY 2022, and remain at that level in the long term. In nominal terms, this equates to an ANS price of \$77.00 per barrel by FY 2028. However, if history is any guide, oil prices are likely to remain volatile, contributing uncertainty to the petroleum revenue forecast in any given year.

Transportation Charges and Other Production Costs

The value of ANS crude oil at the wellhead is calculated by subtracting transportation costs from the

Oil Price and Transportation¹ Costs

Forecast assumptions

Nominal Dollars per Barrel

Fiscal Year	History		Forecast								
	2018	2019 ²	2020	2021	2022	2023	2024	2025	2026	2027	2028
Alaska North Slope West Coast	63.61	67.96	64.00	66.00	67.00	69.00	70.00	72.00	74.00	75.00	77.00
Marine Costs	3.28	3.36	3.39	3.43	3.47	3.52	3.55	3.60	3.65	3.69	3.74
TAPS Tariff	5.84	4.86	4.98	5.16	5.65	6.09	6.25	6.29	6.29	6.33	6.52
Feeder Tariff	0.41	0.49	0.48	0.50	0.52	0.54	0.55	0.56	0.57	0.59	0.63
Quality Bank	-0.17	-0.37	-0.38	-0.40	-0.40	-0.42	-0.44	-0.46	-0.47	-0.46	-0.45
Other ³	0.17	0.19	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.20
Netback Costs Total	9.52	8.53	8.64	8.88	9.42	9.91	10.10	10.18	10.23	10.35	10.64
Alaska North Slope Weighted Average All Destinations	54.09	59.43	55.36	57.12	57.58	59.09	59.90	61.82	63.77	64.65	66.36

¹Field-specific transportation costs represent the average cost for all barrels, whether or not they incur a specific expense. For example, feeder costs represent the average cost for all barrels, including Prudhoe Bay production not using a feeder pipeline. Slopewide costs are estimated based on reported relevant cost information.

²FY 2019 values include four months of actual data for ANS price and two months of actual data for transportation costs.

³This category primarily includes tanker and pipeline losses.

sales price or the prevailing value at point of delivery. Transportation components include marine costs, the Trans-Alaska Pipeline System (TAPS) tariff, feeder pipeline tariffs, quality bank adjustments, and other adjustments. The values used in this netback calculation are shown in Table 4-5.

Marine Transportation Costs

Oil production from the North Slope is delivered through the TAPS to Valdez, Alaska, where it is stored and loaded onto tankers for shipment primarily to the West Coast (Washington, California, and Hawaii) and Alaska's Kenai Peninsula.

For tax purposes, companies are allowed to deduct the total costs under the charter or contract for shipping oil and certain other allowable costs borne by the shipper. For crude oil shipped on tankers that are owned or effectively owned by the producer of the transported oil, which is typically the case, allowable marine costs are depreciation, return on investment, fuel, wages and benefits, routine maintenance, tug and pilotage fees, and dry-docking costs. Marine costs can be broadly categorized as capital, fuel, and labor with each category accounting for roughly one-third of the total.

Trans-Alaska Pipeline System Tariff

Oil produced on the North Slope of Alaska is shipped down the TAPS, and it takes over two weeks

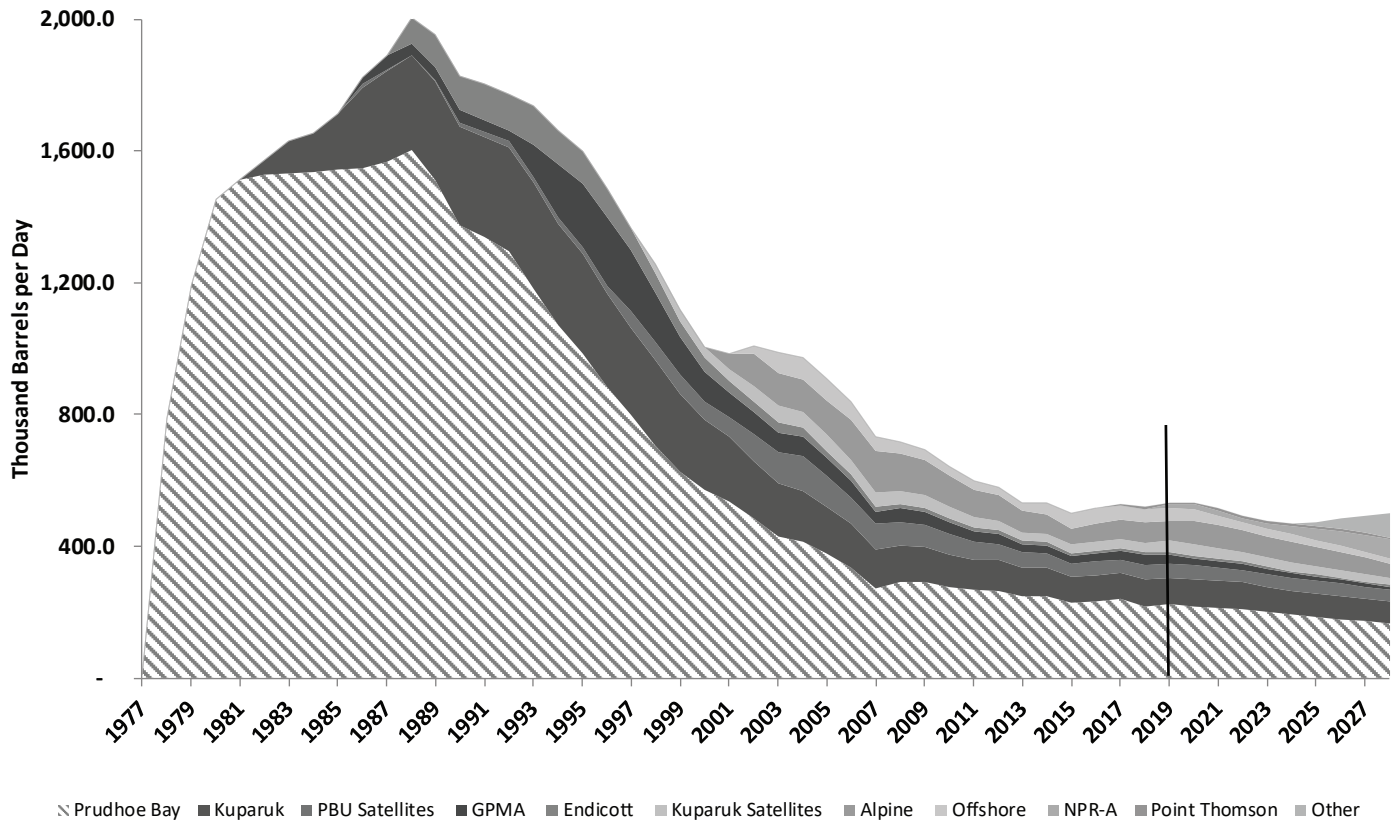
to get to Valdez. The 800-mile, 48-inch oil pipeline costs about \$1 billion a year to operate. Tariff rates on the pipeline are regulated to prevent carriers from exerting undue market power. The Regulatory Commission of Alaska (RCA) regulates intrastate rates and the Federal Energy Regulatory Commission (FERC) regulates interstate rates. FERC has established generic principles for oil pipelines to use a cost-of-service method for determining tariffs charged to transport oil.

With a cost-of-service method, rates are designed around what it costs a pipeline company to provide the service and have an opportunity to earn a reasonable rate of return on its investment. Major components are operation and maintenance expenses, depreciation, income taxes, cost of debt, and rate of return.

The department's forecasting model uses a simplified cost-based tariff model to project the cost of transporting a barrel of oil on the TAPS. The forecast does not attempt to predict the outcome of pending litigation or estimate the level and timing of protested tariffs. Cost-of-service components are projected and then summed for each year to estimate the total cost of service or the total revenue required to operate the pipeline. This estimated total revenue requirement is divided by volume to calculate the average cost per barrel. The ratio is sensitive to the production profile

Alaska North Slope Production

By production area, FY 1977 to FY 2028



and suggests that if production declines over time, the tariff will increase as costs are spread over fewer barrels of production.

Feeder Pipeline Tariffs

Feeder pipelines move the crude oil produced from the various North Slope oil fields to Pump Station No. 1 at the northern terminus of TAPS. Shippers on these “jurisdictional pipelines” pay a tariff that covers pipeline operations costs and provides a reasonable rate of return. The seven jurisdictional feeder pipelines are: Kuparuk, Milne, Endicott, Badami, Alpine, Northstar, and Point Thomson.

Feeder pipeline tariff rates are forecasted by estimating the total cost-of-service and the throughput volumes for each pipeline. The cost-of-service estimate for each pipeline is divided by the respective volumes from the production forecast.

Lease Expenditures

Due to the deductibility of costs in the production tax equation, the department must forecast lease ex-

penditures in addition to oil prices, production, and transportation costs. Lease expenditures are defined as the upstream costs that are directly related to exploring for, developing, or producing oil or natural gas.

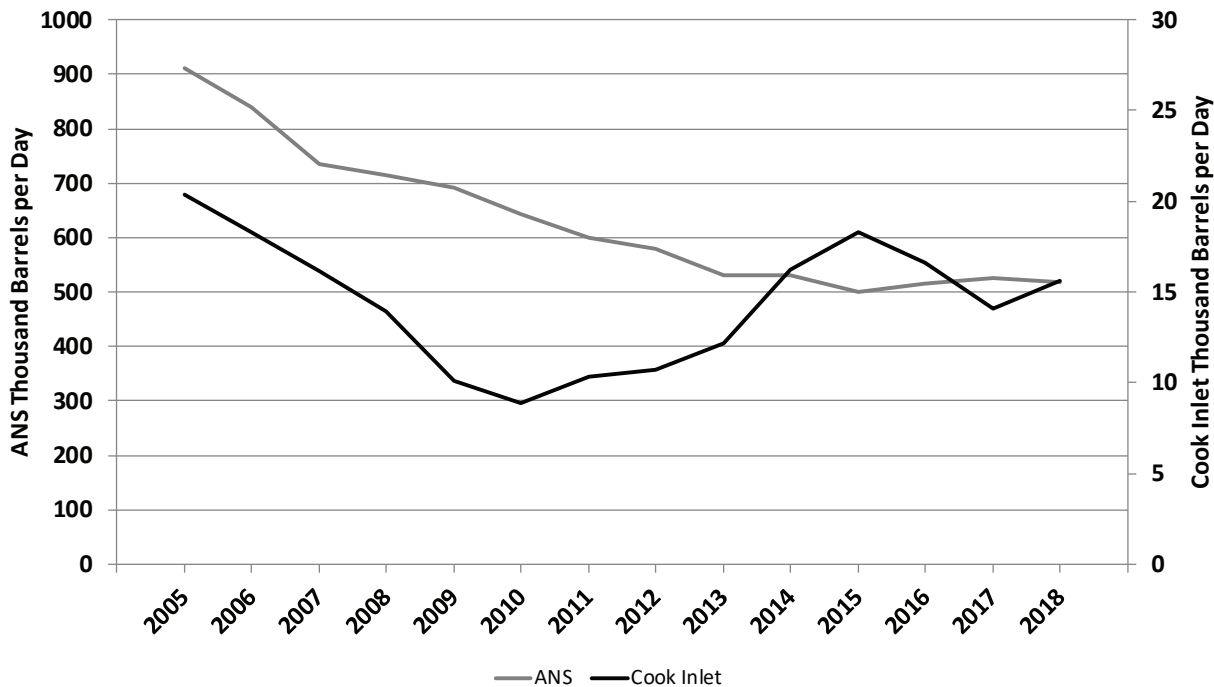
Forecast Methods

The Department of Revenue receives information about lease expenditures on annual tax returns and monthly information filings from oil and gas companies operating in the state. Semi-annually, the department also receives projections of lease expenditures for each property for up to five years in the future. These reports are provided by the operators of the properties and are a major component of the lease expenditure portion of the revenue forecast.

The department also uses several other means to forecast lease expenditures, including reviewing plans of development as well as other publicly available information from industry publications and news articles.

Alaska North Slope and Cook Inlet Production

FY 2005 to FY 2018



Lease Expenditures Forecast

In FY 2018, companies reported \$2.6 billion in North Slope operating expenditures (also known as OPEX), and an additional \$1.7 billion in North Slope capital expenditures (CAPEX).

For FY 2019, the department forecasts North Slope operating expenditures of \$2.7 billion, and capital expenditures of \$1.9 billion. For FY 2020, the department forecasts North Slope operating expenditures of \$2.8 billion, and capital expenditures of \$2.6 billion.

In recent years, companies have reduced spending, both in response to recent oil market developments as well as changes to state tax policy. Looking forward, there are several potential new developments on the horizon that could lead to increased investment in future years, such as Mustang, Pikka, Willow, and others. This forecast tentatively includes some production from several of these new opportunities, as discussed later in this chapter.

The forecast reflects continued pressure on operating costs at existing North Slope fields, as companies continue working to reduce the cost structure of aging fields. Overall capital expenditures are expected to increase, as companies invest in new developments that are included in the production forecast. Once

these developments begin production, they are expected to lead to increased overall operating expenditures later in the forecast period.

For areas outside the North Slope (including Cook Inlet), total lease expenditures were about \$540 million in FY 2018, and the forecast for total lease expenditures outside the North Slope is \$464 million for FY 2019 and \$411 million for FY 2020.

It should be noted that spending estimates are subject to many uncertainties, including oil prices, and the ability of projects to obtain final company approval, and financing. Longer term, the department continues to see significant upside potential for investment. In particular, many new developments included in the production forecast are included on a “risky” basis, meaning they are only partially counted in the forecast based on a probability of occurring within the 10-year time horizon. Any associated costs for those fields are also included on a “risky” basis, using similar risk factors. Also, expenditures for developing potential discoveries from some of the exploration taking place in the state are not yet included in the forecast, and will not be until those developments meet the thresholds for inclusion in the production forecast. More information on the risk adjustment methods incorporated into the production forecast

Production Forecast Key Elements

An overview

Element	Method
Forecaster	Department of Natural Resources' Resource Evaluation and Commercial teams in collaboration with Department of Revenue staff.
Time Horizon of Forecast	A 10-year oil production forecast for DOR's <i>Revenue Sources Book</i> 10-year revenue forecast, and a 20-year forecast for DOR's internal planning purposes.
Modeling Method	Probabilistic – Forecast is likely value taken from a range of possible outcomes consistent with industry best practice.
Alternative Production Cases	Probabilistic modeling produces a high case that can be interpreted as the highest production level that could reasonably be expected to occur, and a low case that can be interpreted as the least production that could reasonably be expected to occur.
Currently Producing Method	Pool-level decline curve analysis.
Under Development	Based on planned field development activities presented by the operator in the Unit Plan of Development (POD) for each pool, generally for projects starting in next 12 months. Risk factors incorporated into production model.
Under Evaluation	Based on planned field development activities, and informed by operator forecasts, generally for projects starting in one to 10 years. Risk factors incorporated into production model.
Risking	Adjustments for various types of risk are incorporated into the production model. An additional risk factor is individually applied for each new field starting in the two- to 10-year window.
Spring Forecast Update	Pool by pool ground-up forecast based on new production data and operator plans.

can be found in the production volumes section of this chapter.

Appendix D-1 provides a 10-year history and 10-year forecast of lease expenditures for the North Slope and non-North Slope. To provide an additional level of detail, North Slope expenditures are further categorized as either expenditures for producing non-GVR fields ("legacy fields") or expenditures for other areas (newer fields, exploration, and development).

Production Volumes

Future oil production is crucial to forecasting oil revenue, since it is a key variable used to calculate both production taxes and royalties. It is also a factor in determining future pipeline tariff rates, which impact the wellhead value on which both taxes and royalties are calculated. Future production also influences the economic life of infrastructure, which is a factor in property tax assessment.

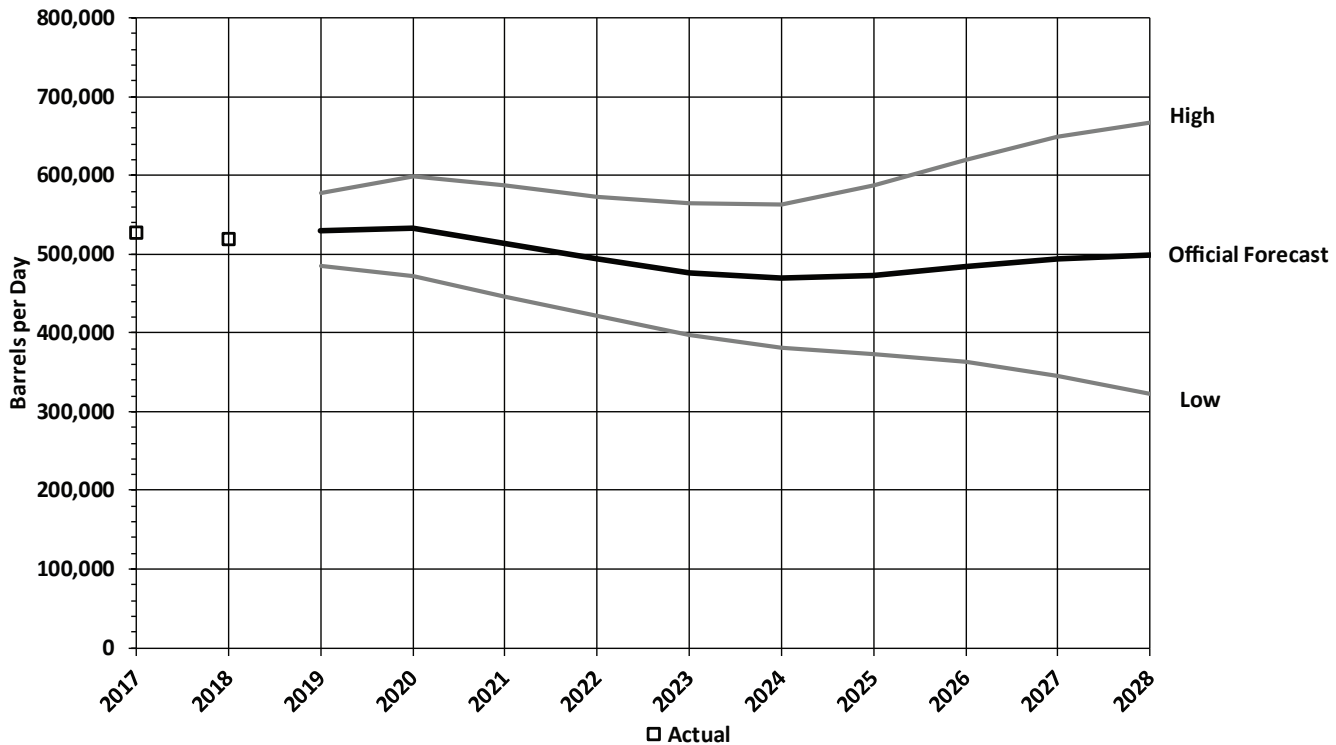
Geographic Impact

Production from different geographic areas has different implications for petroleum revenue. Oil produced within state boundaries is subject to state taxes, but oil produced beyond 3 miles offshore is not. The state collects 100% of the royalties on state-owned lands while royalties from oil produced on federal lands are shared with the state. For royalties from oil produced on private lands, the state does not collect a share of royalty directly, but instead assesses a tax on the private landowner royalty interest as part of the production tax.

Offshore leases 3 to 6 nautical miles from shore are federal leases, under which the state is entitled to 27% of the amount the federal government collects in bonuses, rents, and royalties. The authority for this revenue sharing is the federal Outer Continental Shelf Lands Act, Section 8(g). This 3-mile band is referred to as the "8(g) zone." The state is entitled to 50% of the bonuses, rents, and royalties that the federal govern-

Alaska North Slope Petroleum Production Forecast

FY 2017 to FY 2028



ment receives from the leasing of lands in the NPR-A. The federal government dictates that shared NPR-A revenue must be used for specific purposes, and therefore it is considered restricted revenue in this forecast.

Forecast Methods

The oil production forecast is developed internally by the Alaska departments of Revenue, and Natural Resources. A presentation of key elements of the production forecast process can be found in Table 4-6.

The oil production forecast consists of oil volumes produced from three categories:

- Currently Producing (CP) – Oil wells and pools that are currently in production. This category includes production from wells that are already in service prior to the start date of the forecast.
- Under Development (UD) – New wells and pools that are planned, funded, and have partner alignment; typically, with production expected in the first 12 months of the forecast period.
- Under Evaluation (UE) – New wells and pools that are expected to begin production in years two through 10 of the forecast period, and may not yet have final funding decisions or partner alignment.

Production from the UE category includes production that could eventually result from recent exploration or discoveries (Pikka and Smith Bay, for example), as well as known fields that could be expected to begin sustained production during the relevant time horizon (Liberty, for example). These fields have been included in this year's forecast and have been risked for a chance of occurrence within the 10-year forecast period, with statistical uncertainty ranges around their start-up dates and oil production rate profiles.

As in past years, the production forecast is focused specifically on oil production because that provides the majority of the state's revenue. The Department of Revenue uses a basic estimate of gas production for internal modeling purposes, based on current production volumes plus expected new fields.

Currently Producing Volumes

CP volumes are forecast at the pool-level using decline-curve analysis. Technical experts from the

Alaska North Slope Oil Production

By category, FY 2019 – FY 2028 forecast

Fiscal Year	Barrels per Day									
	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Low Case	485,002	471,610	445,505	421,761	397,428	380,327	372,322	363,529	345,105	322,830
Percent Change from Prior Year	-6%	-3%	-6%	-5%	-6%	-4%	-2%	-2%	-5%	-6%
Official Forecast	526,787	533,197	514,233	493,225	476,682	470,035	472,731	484,089	493,378	498,825
Percent Change from Prior Year	2%	1%	-4%	-4%	-3%	-1%	1%	2%	2%	1%
High Case	578,067	598,694	586,818	572,894	564,413	562,591	587,507	619,060	648,879	667,069
Percent Change from Prior Year	12%	4%	-2%	-2%	-1%	0%	4%	5%	5%	3%
Production from GVR-Eligible Fields under Official Forecast	45,054	48,370	21,834	2,515	8,641	10,409	7,327	4,853	6,772	123
Percent from GVR-Eligible Fields under Official Forecast	9%	9%	4%	1%	2%	2%	2%	1%	1%	0%

Note: GVR is an acronym for Gross Value Reduction.

Department of Natural Resources utilize data from the Alaska Oil and Gas Conservation Commission to develop a time series dataset to assess the future production profile of fields that are already in production. This data is provided by the producers and includes information on reservoir characteristics, oil flow rates, gas/oil ratios, and water cuts. Using these data and decline-curve analyses, an expectation for future production is developed for each producing pool. Planned downtime is factored in for known facilities maintenance and summer turnaround work, and anticipated responses are incorporated into future production. This forecast category also incorporates the expected decline rate for each oil pool.

Production from CP areas is the least-speculative category in the production forecast, as production comes from developed reserves with known production characteristics, infrastructure, and constraints.

Under Development Volumes

UD volumes are forecasted using planned field development activities presented by the operator in the Plan of Development (POD) for each pool. Production from planned infill wells is determined using the well

performance from historical analogue wells. When a project has funding, approval, and a drilling plan, but is not yet developed, the volumes from that project are categorized as UD if production is expected to begin in the first year of the forecast period. If a project does not have these qualifiers, the expected future volumes from it are not considered in the UD category.

Volumes in the UD category may include production from infill drilling within existing units and other activities that lead to incremental oil production within the next 12 months. New pools or areas of production expected to be in production within the next 12 months also fall within this category.

Because all oil in this category requires some level of capital investment and the use of equipment, there is potential for each of these projects to be delayed or abandoned. The actual performance of each project is also uncertain. Therefore, some consideration must be given to the associated risk, or else the forecast is prone to be overly optimistic. In the best-case scenario, all projects would come in on-time, on-budget, and on-target. The forecast incorporates a 5% occurrence risk factor for each individual project.

Petroleum Property Tax¹

Distribution and local mill rates, FY 2018

Millions of Dollars

Taxing Jurisdiction	Gross Tax	Local Share	State Share	Local Effective Mill Rate
Unorganized	62.0	0.0	62.0	N/A
North Slope Borough	413.9	372.1	41.8	17.99
Fairbanks North Star Borough	14.9	11.8	3.0	16.00 ²
Municipality of Anchorage	3.0	2.4	0.6	16.40
Kenai Peninsula Borough	30.1	15.0	15.2	9.95 ²
City of Valdez	38.4	38.4	0.0	20.00
Matanuska-Susitna Borough	0.2	0.1	0.1	12.49 ²
City of Whittier	0.0	0.0	0.0	8.00
City of Cordova	0.2	0.1	0.1	11.81
Total FY 2018	562.6	439.9	122.7	

¹Tax amounts shown here represent the total certified tax roll for the 2018 tax year, due June 30, 2018. These amounts may not exactly match cash revenue received in the fiscal year as presented elsewhere in this book due to a combination of credits and late payments. Gross Tax is total tax paid to both the local government and the State of Alaska. The Local Share and State Share columns represent revenue primarily received in June 2018.

²The Fairbanks North Star Borough, Kenai Peninsula Borough, and Matanuska-Susitna Borough do not have a uniform mill rate for petroleum properties. The rate presented here is the weighted-average effective mill rate based on the 2018 certified tax roll.

Under Evaluation Volumes

UE volumes are forecasted using development concepts and plans presented by operators, as well as production performance and expected ranges developed from analogue wells. Volumes in the UE category are from projects likely to start producing oil in the second through 10th year of the forecast period. Most of the oil in this category is from discovered but currently undeveloped oil accumulations, though conceptually, the category could also include future infill drilling and other activities that lead to incremental oil production from existing fields. Projects may still have hurdles to overcome in relation to funding, Working Interest Owners' sanctioning, regulatory approval, cash flow schedules, or drilling plans. Accordingly, a project-specific risk factor is applied for each individual project.

Because all oil in this category requires capital investment and the use of equipment, there is potential for each of these projects to be delayed or abandoned. The actual performance of each project is also uncertain, as typically there is insufficient production data or other data. Therefore, as with the UD category, consideration must be given to the associated

uncertainty, or else the forecast is prone to be overly optimistic. Based on the forecast team's historical observations and technical judgment, the UE forecast tranche incorporates projects' individual risk of occurrence within the 10-year forecast window, along with statistical uncertainty ranges relating to the date of first production and potential production rates over time.

Production Forecast

ANS oil production averaged 518,400 barrels per day in FY 2018, down from 526,400 barrels per day in FY 2017. In FY 2018, Cook Inlet's oil production averaged 15,700 barrels per day, compared to the FY 2017 volume of 14,100 barrels per day. Historical daily average production from ANS and Cook Inlet is shown in Figure 4-E.

Many of the projects reflected in the production forecast are still subject to uncertainty and final investment decisions. Many projects are marginally economic in the current environment and such projects are contingent on realization of lower costs, higher oil prices and/or fiscal certainty. Depending on how these factors play out over time, combined

with uncertainty about reservoir performance for new fields, future production could be substantially higher or lower than what is shown in the forecast.

North Slope production is expected to remain over 500,000 barrels per day through FY 2021, then average just under 500,000 barrels per day for the remainder of the forecast period. Figure 4-E shows historical volumes for the past two years and a 10-year forecast. Additionally, a range is provided for potential production possibilities to reflect future uncertainty. The forecast modeling uses a probabilistic approach that allows for multiple values, including a high, low, and base case production forecast. The high case can be interpreted as the highest production level that could reasonably be expected to occur, and the low case refers to the least production that could reasonably be expected to occur. The official forecast, or “mean” is a likely production path within this range, but actual production can and will be either higher or lower than this forecast. Values for the forecasts can be found in Table 4-7. Figure 4-D shows historical ANS production by major area with expected production from those areas over the coming 10 years.

Appendix Table C-1 compares the spring 2018 and fall 2018 forecasts. ANS production in the fall 2018 forecast is lower than the spring forecast for all years in the forecast, except FY 2019 and 2027, driven by conservative decline trends overall. The composition of the production forecast has also changed: a greater share of forecast production in the fall 2018 forecast is attributable to and contingent on new developments. Historical production by major producing areas is shown in Appendix Table C-2, which also presents a forecast of volumes aggregated by the same producing areas.

Production Tax Revenue Forecast

In broad terms, future revenue from production tax is a function of the forecasts of the various components. The netback components, as shown in Table 4-5, are deducted from the West Coast destination price to determine an ANS wellhead price, which is multiplied by the projected volume to calculate a gross value at the point of production. Lease expenditures are deducted from the gross value to calculate a net value to which the production tax is applied and adjusted for anticipated credits. The forecast of production tax revenue also accounts for various nuances and provisions of the tax code, including the gross minimum tax, GVR, company-specific differences in investment and field ownership, impacts of natural gas production, and non-North Slope activity.

For the North Slope, in lower price environments, companies are able to use Per-Taxable-Barrel Credits for non-GVR oil to reduce tax liability down to the minimum tax of 4% of gross value. Depending on their specific tax situation, some companies may choose to forgo non-GVR Per-Taxable-Barrel Credits and instead reduce liability below the minimum tax using Per-Taxable-Barrel Credits for GVR-eligible oil, and any small producer or net operating loss credits that may be available. At forecasted oil prices, major companies are expected to pay above the 4% gross minimum tax. Major producers are also not expected to be in a net operating loss situation.

For Cook Inlet, production tax is limited to \$1 per barrel of oil, and 17.7 cents per 1,000 cubic feet of gas. These taxes are expected to amount to around \$10 million per year.

These revenue estimates account for tax credits applied against tax liabilities that reduce the tax payments made to the state. Revenue estimates do not include the impact of tax credits purchased by the state from companies without a tax liability. State purchase of those additional tax credits may be funded through appropriations to the Oil and Gas Tax Credit Fund, as discussed in Chapter 8.

Hazardous Release Surcharge

Up to \$0.05 per barrel of taxable oil is collected and customarily appropriated to the Oil and Hazardous Substance Release Prevention and Response Fund (often simply called the Response Fund). This revenue is reported as unrestricted revenue and collected as part of the production tax.

The Response Fund was created in 1986 and is intended to be a source of funds that can be drawn upon in the event of the release of a hazardous substance for the abatement of damages. The fund is separated into two accounts – a response account and a prevention account. As the names imply, the response fund is designed to respond to a spill or discharge, while the prevention account is intended to support the Alaska Department of Environmental Conservation (DEC) in spill prevention and preparedness activities. The prevention account can also be used to respond to substance releases that are not declared disasters by the governor, and can be used to support other response and prevention programs if appropriated by the Legislature.

The surcharge paid to the response account is \$0.01 per taxable barrel of oil produced in the state. However, the surcharge is suspended when the account has a balance of \$50 million or more. The forecast

assumes that the response surcharge will be in place for the entire forecast period.

The prevention account receives a surcharge of \$0.04 per taxable barrel of oil produced within the state. All interest payments, penalties, settlements, and fines from both accounts are deposited into the prevention account and are available for appropriation to eligible programs. This account does not have a balance limit.

In 2015, the Legislature added additional funding to DEC's Spill Prevention and Response Division through a surcharge on refined fuel sales in the state. This is discussed in more detail in Chapter 5.

Royalties

A royalty interest is an ownership of future production, and is a typical feature in oil and gas contracts with a landowner. When a company bids on a lease, it pays an up-front bonus payment, agrees to an annual rental payment, and typically offers a royalty interest in any discoveries that may be found. Thus, the bonus is a guaranteed payment to the state as the owner, while the royalty is a contingent amount only paid if there is success in production.

In Alaska, the state retains ownership of all subsurface minerals on state lands and requires a minimum royalty rate of one-eighth (12.5%) of any production, although there are exceptions that can be made for economically challenged projects. In other U.S. oil producing areas, private citizens usually own these subsurface rights and the royalty is paid directly to the landowner, rather than the government. Occasionally, a company may enter into a net profits sharing lease, which bases the royalty payment on net profits rather than the gross value of the oil. These profit-sharing leases can reach as high as 75% of company profits after the company's development costs are recovered. Most leases in Alaska are one-eighth (12.5%) or one-sixth (16.67%) royalty.

Alaska has the option of allowing the company to sell the royalty oil on its behalf (known as royalty in-value, or RIV) or to receive and sell the royalty oil itself (known as royalty in-kind, or RIK). The value the state accepts for RIK cannot be lower than the value it would receive for RIV.

The state currently holds two contracts to sell RIK oil. In April 2016, the state signed a legislatively approved five-year contract to sell up to 25,000 barrels of oil per day to the Tesoro refinery in Cook Inlet. Under that contract, oil delivery began on Aug. 1, 2016, and is planned to end on July 31, 2021. Additionally, a four-year contract, which was approved by the Legislature

during the 2017 session, sells between 16,400 and 20,500 barrels of oil per day to Petro Star Inc.'s North Pole and Valdez refineries, decreasing to between 8,400 and 10,500 barrels of oil per day in the fourth year of the contract. This contract applies to oil delivered between Jan. 1, 2018, and Dec. 31, 2021.

Most RIV oil comes from leases affected by royalty settlement agreements (RSAs), and the price received for that oil is a derived price based on the value of oil sold on the West Coast with certain adjustments. Costs of shipping the oil on pipelines and tankers are subtracted in order to determine the value of the oil for royalty purposes (called the wellhead value). An allowance for field costs is also applied for production from certain leases. As a result of the field costs allowance, as well as differences in statutes and regulations, the wellhead value for royalty purposes may be slightly different than the wellhead value for production tax purposes. A portion of RIV oil comes from leases not affected by RSAs. While the formulas used to determine value for this oil are similar to the formulas used in the RSAs, they are not necessarily the same.

Royalty Forecast

The Department of Revenue forecasts that \$1.1 billion in unrestricted petroleum royalty revenues will be collected by the Department of Natural Resources in FY 2019. Projections show FY 2028 collections of about \$0.9 billion in unrestricted petroleum royalties. These amounts are inclusive of bonuses, rents, and interest.

A portion of royalty revenue is deposited into the Permanent Fund, and the Public School Trust Fund. Note that for FY 2018-2019, only the constitutionally mandated 25% of minerals royalties were deposited to the Permanent Fund, with the remainder treated as general fund revenue. For FY 2020 and beyond, this forecast assumes that the statutory appropriation of approximately 31% of minerals royalties will be deposited to the Permanent Fund.

Petroleum Property Tax

Property subject to state oil and gas property tax includes property used in the exploration, production, and pipeline transportation of unrefined oil and gas. Each year, the Department of Revenue determines the assessed value for taxable oil and gas petroleum property as of the Jan. 1 assessment date. The state levies a tax on its assessments at a rate of 20 mills (2%) of the assessed value. When oil and gas property is located within a municipality, the municipality may also levy a tax on the department's assessments at the same rate the municipality taxes all other prop-

erty within its municipal boundary. The tax paid to a municipality on oil and gas property acts as a credit toward payment to the state on those same assessments. The North Slope Borough, the primary recipient of municipal petroleum property tax, currently levies a rate of 17.99 mills. This forecast assumes this rate will remain constant through the forecast period.

Forecast Method

Forecasting state revenue from oil and gas property tax starts with the most recent certified assessed values for oil and gas property in Alaska. Assumptions are made regarding future capital investment and typical depreciation curves are applied. The state rate of 20 mills is applied to the forecast values, and estimates of payments to municipalities are then subtracted to estimate net receipts to the state. Table 4-8 shows the state share and local share of oil and gas property tax by jurisdiction.

Property Tax Forecast

In FY 2018, the state collected \$122 million in unrestricted revenue from petroleum property tax. About \$126 million is expected in FY 2019 with a gradual decline to \$104 million in FY 2028. These amounts represent only the state share of property tax. The total assessment roll for the state is approximately \$28 billion, resulting in total petroleum property tax collection of roughly \$560 million including the municipal share.

Corporate Income Tax

An oil and gas corporation's Alaska income tax liability depends on the relative size of its Alaska and worldwide activities and the corporation's total worldwide net earnings. The corporation's Alaska taxable income is derived by apportioning its worldwide income to Alaska, based on the average of three factors as they pertain to the corporation's Alaska operations: (1) tariffs and sales, (2) oil and gas production, and (3) property. The tax rates are graduated according to the schedule in Table 5-3.

Corporate income tax (CIT) revenue is one of the more volatile revenue sources for Alaska because of the year-to-year variation in the profitability of oil companies as well as the substantial lag time between estimated tax payments and the final annual true-up.

Forecast Method

The corporate income tax forecast is derived from a statistical model based on the price of oil, refining margins, total Alaska oil production, and an industry

costs index. Information about expected refunds of prior-year taxes is also incorporated.

Corporate Income Tax Forecast

In FY 2018, oil and gas corporate income taxes generated \$68 million, as rebounding oil prices helped company profits recover after two years of net-negative oil and gas corporate income tax collections. The Department of Revenue expects continued improvement in corporate income tax collections for oil and gas companies, forecasting FY 2019 revenue of \$195 million and FY 2020 revenue of \$210 million. By FY 2028, corporate income tax collections are projected to increase to \$240 million.

Oil corporate income tax revenue is difficult to forecast accurately due to its reliance on volatile oil prices, as well as oil and gas companies' profits and their other global activity. A major new development that significantly increased industry activity or production in Alaska could render these forecasts conservative, as could an increase in prices above the forecast. On the other hand, decline in either company activity or prices could make the forecasts too optimistic.

Oil Revenue Summary

As shown in Table 4-1, total petroleum revenue is expected to amount to \$2.7 billion in FY 2019 and then \$2.2 billion in FY 2020. The revenue stream is expected to decline to \$2.1 billion by FY 2024 before increasing again and reaching \$2.8 billion by FY 2028.

Petroleum remains a major source of unrestricted general fund revenue during the forecast period. In FY 2018, petroleum accounted for 80% of unrestricted revenue. The percentage is expected to be 32% by FY 2028, lower than the historical share due to including a portion of the value of the Permanent Fund as unrestricted revenue beginning in FY 2019. Excluding the Permanent Fund draw, petroleum would account for 76% of expected revenue in FY 2028. In terms of total state revenue (which includes restricted components), in FY 2018, petroleum accounted for 20% of total revenue and is expected to contribute 22% of total revenue in FY 2028.

Major Gas Sales and ANWR

Two major petroleum-related projects have potential to add to state revenues beyond what is presented in this chapter.

First, the state is continuing to work on a project to commercialize North Slope natural gas reserves. That project is being progressed by the Alaska

Gasline Development Corporation (AGDC), a wholly owned subsidiary of the state. The AGDC-led project consists of a gas treatment plant on the North Slope, a pipeline to the Kenai Peninsula, and a Liquefied Natural Gas (LNG) export facility at Nikiski. Multiple offtake points would allow for in-state gas use as well. This project could lead to LNG exports and substantial new state revenues as early as the mid-2020s. To be conservative, major gas sales are not included in this forecast until the project reaches a Final Investment Decision (FID).

Additionally, as part of federal tax legislation enacted in 2017, the U.S. Department of Interior is directed to hold two lease sales in the Arctic National Wildlife Refuge (ANWR) "1002 area" over the 10-year period. Initially, the Congressional Budget Office projected the two lease sales would take place in Federal Fiscal Year (FFY) 2022 and FFY 2025, and estimated the sales would generate a total \$2 billion in proceeds. That level of proceeds would be significantly higher than recent North Slope lease sales, though lower than some past lease sales in the federal Outer Continental Shelf (OCS). More recently, the Department of Interior has indicated a desire to accelerate the first lease sale to as early as 2019.

The ANWR lease sales are of interest to Alaska both as a source of future production and economic activity, and also because the state will receive a portion of any federal bonuses, rents, and royalties from the leases. Currently, it is anticipated that 50% of ANWR revenue will be shared with the state and Alaska Native corporations. Of revenue received by the state, 50% of the state's share will go to the Permanent Fund, 0.5% to the Public School Trust Fund, and the remaining share would be unrestricted general fund revenue. Given the uncertainty regarding timing and amount of potential revenue from ANWR, lease sale revenue has not been included in this revenue forecast, but the Alaska Department of Revenue will continue to monitor this important topic. Additionally, any production from ANWR will not be included until a discovery is made that meets the criteria for inclusion in the production forecast.

Restricted Revenue

As mentioned earlier, some oil revenue is deposited into special accounts for special purposes, including the Permanent Fund, Constitutional Budget Reserve Fund, and Public School Trust Fund. Revenue is also deposited into the NPR-A Fund. All the revenue going into these funds is considered restricted revenue.

Restricted Royalties

The majority of restricted revenue comes from royalties.

At least 25% of royalty collections is required by the Alaska Constitution to be deposited into the Permanent Fund. Then, for some leases as determined by statute, an additional 25% is deposited into the Permanent Fund, for a total deposit of 50%. The weighted average across both types of deposits results in about 31% of all royalty collections being deposited into the Permanent Fund.

Another 0.5% of royalty collections is deposited into the Public School Trust Fund to support the state public school program.

The FY 2019 budget, however, calls for only the constitutionally mandated 25% of royalties to be deposited into the Permanent Fund. That 25%, along with the 0.5% of royalty collections that goes to the Public School Trust Fund, means the remaining 74.5% of royalty collections will be treated as unrestricted general fund revenue in FY 2019.

NPR-A Fund

The state is entitled to 50% of the bonuses, rents, and royalties that the federal government receives from the leasing of federal lands in the National Petroleum Reserve – Alaska. This revenue is deposited into the NPR-A Special Revenue Fund and is restricted for specific uses. These funds can be appropriated to municipalities in the form of grants to compensate for impacts resulting from the development on those lands.

Revenue that is not appropriated is treated like other royalty revenue (25% is deposited into the Permanent Fund, and 0.5% to the Public School Trust Fund), with the remaining revenue available for appropriation to the Power Cost Equalization Fund, Rural Electric Capitalization Fund or general fund. For purposes of categorization, these funds are considered federal restricted revenue within the category of petroleum revenue, as they are collected from oil activity.

FY 2019 marks the first year of commercial production from NPR-A, with production starting at the Greater Moose's Tooth (GMT) unit. As new fields come online in NPR-A, it is anticipated that this federal revenue source will increase substantially. However, the majority of this production is expected to be on private land, at least initially.



Chapter 5

Non-Petroleum Revenue

Introduction

Revenue collections from in-state activities other than petroleum include non-petroleum taxes, charges for services, fines and forfeitures, licenses and permits, rents and royalties, and miscellaneous and transfer revenue sources such as dividends from public entities.

These sources are categorized as “Non-Petroleum Revenue, except federal and investment,” sometimes shortened to “Non-Petroleum Revenue.” (Federal and investment revenue are discussed in Chapters 6 and 7, respectively.)

The non-petroleum revenue sources are each sub-categorized into unrestricted, designated general fund, and other restricted revenue in Table 5-1. The amounts of each revenue type are reflected in Table 5-2, as well as Tables 5-4 through 5-8.

This chapter provides the history of non-oil revenue sources for fiscal year 2018 and forecasts revenue

for FY 2019 and FY 2020. The chapter also includes descriptions of each revenue source and explains the methods used to forecast them.

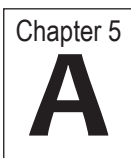
The Department of Revenue’s Tax Division website and the division’s annual reports contain more comprehensive historical information about each type of tax the division collects. The Alaska Department of Administration’s *Comprehensive Annual Financial Report* contains more detail about many non-tax revenue sources.

Taxes

Alcoholic Beverage Tax

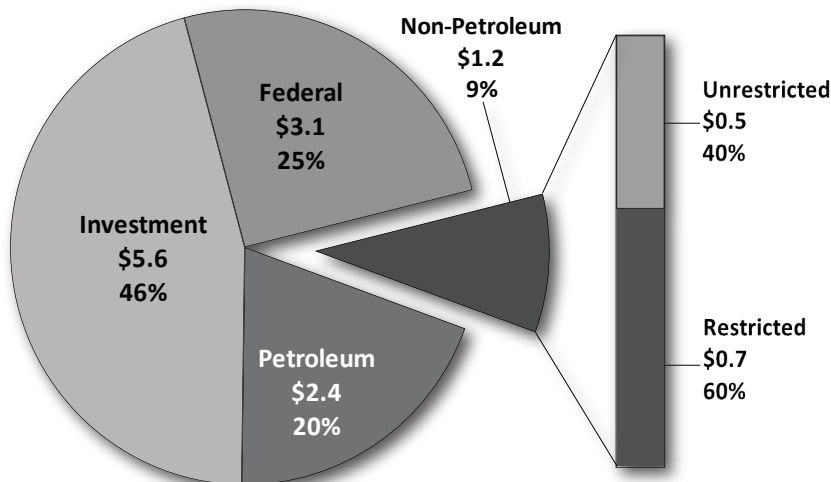
Alcoholic beverage taxes are collected primarily from wholesalers and distributors of alcoholic beverages sold in Alaska.

The per-gallon tax rates on alcoholic beverages are \$1.07 for beer, \$2.50 for wine, and \$12.80 for liquor.



FY 2018 Non-Petroleum Revenue

By restriction and type, in billions of dollars



Non-Petroleum Revenue

By restriction and category

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020
<u>Unrestricted</u>			
Unrestricted Non-Petroleum Revenue			
Taxes	272.6	354.4	360.0
Charges for Services	7.0	7.0	7.0
Fines and Forfeitures	12.5	12.5	12.5
Licenses and Permits	37.1	39.1	39.1
Rents and Royalties	5.8	5.7	5.1
Other	131.2	69.7	69.9
Total Unrestricted Non-Petroleum Revenue	466.1	488.5	493.6
<u>Restricted</u>			
Restricted Non-Petroleum Revenue			
Designated General Fund			
Taxes	136.5	89.8	92.4
Charges for Services	257.8	256.1	256.1
Fines and Forfeitures	11.0	4.5	5.0
Licenses and Permits	1.1	1.1	1.1
Rents and Royalties	11.1	11.1	11.1
Other	16.9	16.9	16.9
Subtotal Designated General Fund	434.4	379.5	382.5
Other Restricted			
Taxes	100.0	100.9	101.6
Charges for Services	45.0	62.1	61.9
Fines and Forfeitures	40.6	14.8	16.6
Licenses and Permits	40.1	40.4	40.6
Rents and Royalties	4.3	4.2	8.4
Other	21.1	21.1	21.1
Subtotal Other Restricted	251.2	243.5	250.3
Total Restricted Non-Petroleum Revenue	685.6	622.9	632.8
Total Non-Petroleum Revenue	1,151.7	1,111.4	1,126.4

Non-Petroleum Tax Revenue

By source and restriction

	Millions of Dollars		
	History	Forecast	
Fiscal Year	2018	2019	2020
<u>Unrestricted</u>			
Corporate Income Tax (Non-Petroleum)	119.6	135.0	150.0
Excise Tax			
Alcoholic Beverage	19.6	19.9	20.1
Tobacco Products – Cigarettes	24.4	25.4	24.5
Tobacco Products – Other (General Fund)	13.0	15.5	16.1
Electric and Telephone Cooperative	0.2	0.2	0.2
Insurance Premium Tax ¹	0.0	56.9	57.5
Marijuana ²	5.4	6.2	5.3
Motor Fuel Tax ³	0.0	0.0	0.0
Motor Fuel Tax (conservation surcharge)	6.3	6.2	6.1
Tire Fee	1.4	1.4	1.4
Subtotal Excise Tax	70.4	131.7	131.1
Fish Tax			
Fisheries Business	21.2	17.3	17.7
Fishery Resource Landing	3.5	4.4	4.5
Subtotal Fish Tax	24.7	21.7	22.2
Other Tax			
Charitable Gaming	2.4	2.4	2.4
Estate	0.0	0.0	0.0
Large Passenger Vessel Gambling	8.6	10.1	10.8
Mining License	46.9	53.5	43.5
Subtotal Other Tax	57.9	66.0	56.7
Total Unrestricted Non-Petroleum Tax Revenue	272.6	354.4	360.0
<u>Restricted</u>			
Designated General Fund			
Alcoholic Beverage (Alcohol and Drug Treatment and Prevention Fund)	19.6	19.9	20.1
Insurance Premium/Other ^{1, 4}	62.4	7.9	7.0
Vehicle Rental	10.6	10.9	11.2
Marijuana ²	5.4	12.5	15.9
Motor Fuel Tax (Non-Aviation) ³	36.3	36.1	35.8
Tobacco – Cigarettes (Tobacco Use Education and Cessation Fund)	2.3	2.5	2.4
Subtotal Designated General Fund	136.5	89.8	92.4

(Table continued, next page)

Non-Petroleum Tax Revenue

By source and restriction (*Continued*)

	Millions of Dollars		
	History	Forecast	
	Fiscal Year	2018	2019
Other Restricted			
Tobacco – Cigarettes (School Fund)	15.8	17.1	16.5
Commercial Passenger Vessel Tax (state share)	4.1	3.3	3.5
Commercial Passenger Vessel Tax (municipal share)	16.8	20.2	21.5
Cost Recovery Fisheries Assessment	0.0	0.0	0.0
Dive Fishery Management Assessment (designated management areas)	0.5	0.5	0.6
Electric and Telephone Cooperative (municipal share)	4.6	4.6	4.6
Fisheries Business (municipal share)	25.0	21.7	22.2
Fishery Resource Landing (municipal share)	6.3	6.7	6.9
Motor Fuel Tax – Aviation (state share)	4.4	4.4	4.4
Motor Fuel Tax – Aviation (municipal share)	0.1	0.1	0.1
Salmon Enhancement (Aquaculture Association share)	9.1	9.3	9.5
Seafood Development (qualifying regional associations)	2.8	2.9	3.0
Seafood Marketing Assessment (seafood marketing programs)	9.9	10.1	10.3
Settlements to Constitutional Budget Reserve Fund (non-petroleum taxes)	0.0	0.0	0.0
Subtotal Other Restricted	99.4	101.0	103.0
Total Restricted Non-Petroleum Tax Revenue	235.9	190.7	195.3
Total Non-Petroleum Tax Revenue	508.6	545.2	555.4

¹ In FY 2016, House Bill 374 reclassified the previously unrestricted portion of the insurance premium tax to designated general fund revenue. Under current law, this portion of the insurance premium tax will revert to unrestricted revenue beginning in FY 2019.

² Fifty percent of marijuana tax revenue is deposited into the Recidivism Reduction Fund and treated as designated restricted revenue. Beginning in October 2018, an additional 25% of marijuana tax is deposited into the Marijuana Education and Treatment Fund, bringing the total designated restricted share of the marijuana tax to 75%.

³ Starting with FY 2018, non-aviation motor fuel tax will be considered designated general fund revenue.

⁴ In addition to the workers' compensation insurance premiums for the insurance premium tax, this amount also includes services fees from employers who are self-insured.

Beer from qualifying small breweries is taxed at a rate of \$0.35 per gallon.

The revenue is deposited into Alaska's general fund, but half of that amount is put in a subfund of the general fund, the Alcohol and Other Drug Abuse Treatment and Prevention Fund, and is treated as restricted in this forecast. The other half is treated as unrestricted in this forecast.

The Department of Revenue forecasts alcoholic beverage taxes based on the historical growth rate of consumption. The department forecasts tax revenue by applying these growth rates to the previous year's consumption, accounting for uncertainty of the true long-term trend, then multiplying predicted consumption by the tax rate.

Alcoholic beverage tax revenue is projected to continue rising slowly based on the overall growth rate

of consumption. Alcohol taxes are one of the state's least-volatile revenue sources, so they can be forecasted with fairly high precision.

Charitable Gaming

Under Alaska law, municipalities, and qualified non-profit organizations may conduct specific charitable legal gaming activities to derive public benefit in the form of money for charities and revenue for the state.

The department collects permit and license fees, a 1% net proceeds fee, and a 3% pull-tab tax.

While all charitable gaming receipts are shown as unrestricted revenue in this forecast, a portion is actually classified as program receipts in the budget, as the

Corporate Income Tax

Rate schedule¹

Taxable Income	Marginal Tax Rate
\$0-\$25,000	0.00%
\$25,000-\$49,000	2.00%
\$49,000-\$74,000	3.00%
\$74,000-\$99,000	4.00%
\$99,000-\$124,000	5.00%
\$124,000-\$148,000	6.00%
\$148,000-\$173,000	7.00%
\$173,000-\$198,000	8.00%
\$198,000-\$222,000	9.00%
\$222,000+	9.40%

¹ Effective for tax years beginning on or after Aug. 26, 2013.

Tax Division is responsible for regulation of charitable gaming in the state.

Commercial Passenger Vessel Taxes

Alaska voters approved an initiative to impose new taxes and fees on commercial passenger vessels in 2006, which the Alaska Legislature modified in 2010. Following are descriptions of the various commercial passenger vessel taxes and fees in current law. The Ocean Ranger Fee is described under the Environmental Compliance Fund in the Charges for Services category.

- The commercial passenger vessel (CPV) tax is a tax of \$34.50 on each passenger aboard a commercial passenger vessel with 250 or more berths that spends more than 72 hours in Alaska waters over the course of one voyage. Revenue is deposited into a subfund of the general fund, the CPV tax account. Five dollars of the tax can be appropriated to each of the first seven ports of call.

If a commercial passenger vessel visits a port that levies a tax similar to the CPV tax, and that tax was in place before Dec. 17, 2007, the local tax imposed is allowed as a credit against the state tax. Only Juneau and Ketchikan had qualifying levies in place at that time (Juneau's fee is \$8 per passenger and Ketchikan's is \$7).

All funds received from the CPV tax must be spent on port facilities, harbor infrastructure, and other services provided to commercial

passenger vessels and the passengers on board those vessels. All revenue from the tax is considered restricted.

- The large passenger vessel gambling tax is a tax of 33% on the adjusted gross income from gaming or gambling activities aboard large passenger vessels in the state. Revenue goes to the general fund and is considered unrestricted.
- The Alaska corporate income tax applies to large commercial passenger vessels, and the revenue is included in the forecast of corporate income taxes.
- There are penalties for false reporting, violating environmental regulations, and failing to make proper disclosures on promotions and shore-side activity sales. Revenue from these provisions is included in the Fines and Forfeitures section.

More than 1 million passengers visited the state in large passenger vessels in FY 2018, and expectations are similar or slightly higher for FY 2019 and FY 2020. Cruise ship tourism has been gradually recovering since the 2008 recession.

In recent years, the municipal share of the CPV tax has been much larger than the state share. The Department of Revenue's model for the CPV tax is based on 2017 data, and the most recent industry forecasts of the number of cruise ship passengers who will visit Alaska. There is uncertainty about how the tourism industry will grow or decline, as well as overall economic growth, leading to moderate uncertainty in the forecast. Table 5-2 shows the projected breakdown of state and municipal shares of the CPV tax.

Corporate Income Tax

Alaska levies the corporate income tax on corporations doing business in the state. Corporate tax rates are graduated according to the schedule in Table 5-3.

S-corporations and limited liability companies (LLCs) that file federally as partnerships are generally exempt from corporate income tax.

A corporation computes its tax liability based on the federal taxable income of its water's edge combined report, with Alaska adjustments.

Non-oil and gas corporations apportion their income to Alaska based on three factors: sales, property, and payroll. Alaska taxable income is de-

terminated by applying the calculated apportionment factor to the corporation's modified federal taxable income.

The Department of Revenue forecasts corporate income tax for non-oil companies based on two separate but connected projections of refunds and payments.

The department forecasts refunds by using a lagged economic growth regression model to predict refund amounts.

For forecasting the payments, the department uses a regression model based on past collections, overall U.S. economic activity growth, and current metal prices. Metal prices are used as a separate variable because mining activity accounts for much of the year-to-year variation in non-oil corporate income tax collections.

Corporate income tax is difficult to forecast with precision because it depends on nationwide economic growth and volatile metal prices. A strong national economy and improved metals prices are expected to translate to rising corporate income tax collections.

The corporate income tax for oil companies is discussed in Chapter 4.

Electric and Telephone Cooperative Taxes

The electric cooperative tax is based on kilowatt hours furnished by qualified electric cooperatives recognized under Title 10 of the Alaska Statutes. The telephone cooperative tax is levied on gross revenue of qualified telephone cooperatives under Title 10.

Revenue from cooperatives located in municipalities is treated as other restricted revenue in this forecast because it is shared 100% with the municipalities. The small amount of revenue collected from cooperatives outside municipalities is retained by the state. Table 5-2 shows the projected breakdown of state and municipal shares.

Fisheries Business Tax

The fisheries business tax (FBT) is levied on businesses that process fisheries resources in Alaska or export fisheries resources from Alaska. Although the tax is usually levied on the act of processing, the tax is often referred to as a "raw fish tax" because it is based on the value of the raw unprocessed fishery resource.

Tax rates vary from 1% to 5%, depending on whether a fish species is classified as "established" or "developing" in the geographic area where it was caught, and

whether it was processed by a shore-based processor, a floating processor, or a salmon cannery.

Revenue from the tax is deposited in the general fund. Half of that revenue (before credits) is shared with qualified municipalities and is treated as other restricted revenue. The remainder (after credits) is treated as unrestricted revenue.

Tax credits for the FBT, including the Salmon and Herring Product Development Credit, apply only to the state portion of the tax, so the Department of Revenue's forecast of the municipal share is usually higher than the state share.

Forecasts of FBT revenue are based on estimated taxable values of the major fisheries in the state and historical effective tax rates. The total FBT revenue in FY 2018 was higher than the previous year, due to higher total catch value in CY 2017.

In FY 2019 and FY 2020, the total amount of FBT revenue is projected to decrease compared to FY 2018, but with considerable uncertainty due to unpredictable fish prices, fish runs, and other factors. Table 5-2 shows the projected breakdown of state and municipal shares.

Fishery Resource Landing Tax

The fishery resource landing tax is levied on fishery resources processed outside Alaska, but first landed in Alaska. Tax liability is based on the unprocessed statewide average price of the fish species. The tax is collected primarily from factory trawlers and floating processors that process fishery resources outside the state's 3-mile limit and bring their products into Alaska for shipment.

The tax rates vary from 1% to 3%, based on whether the species is classified as "established" or "developing." All revenue derived from the tax is deposited in the general fund.

Half of the revenue (before credits) is shared with qualified municipalities, and is treated as other restricted revenue. As with the FBT, tax credits apply only to the state share. The remainder after credits are paid is treated as unrestricted revenue.

The department forecasts fisheries resource landing tax revenue based on estimated taxable values of the major fisheries in the state and historical effective tax rates. Landing tax revenue declined slightly in FY 2018, but based on preliminary reports of fish caught in the 2018 season, the department expects landing tax revenue to rebound in FY 2019. As with the FBT,

Revenue from Charges for Services

By restriction and source

	Millions of Dollars		
	History	Forecast	
Fiscal Year	2018	2019	2020
<u>Unrestricted</u>			
Unrestricted Revenue from Charges for Services	7.0	7.0	7.0
<u>Restricted</u>			
Designated General Fund			
Department of Commerce, Community, and Economic Development Business Licenses	9.6	9.6	9.6
General Government – General Fund Subfunds	7.7	7.7	7.7
Marine Highway Receipts	47.3	51.7	51.7
Commercial Fisheries Entry Commission	7.4	7.1	7.1
Oil and Gas Conservation	7.3	7.7	7.7
Regulatory Commission of Alaska Receipts	10.7	11.4	11.4
Receipt Supported Services	166.4	159.4	159.4
Timber Sale Receipts	1.5	1.5	1.5
Subtotal Designated General Fund	257.8	256.1	256.1
Other Restricted			
Environmental Compliance Fees	1.1	1.1	1.1
General Government – Special Funds	0.5	0.5	0.5
Ocean Ranger Fees	4.4	4.4	4.5
Statutorily Designated	39.0	56.0	55.8
Subtotal Other Restricted	45.0	62.1	61.9
Total Restricted Revenue from Charges for Services	302.9	318.2	318.0
Total Revenue from Charges for Services	309.9	325.2	325.0

the forecast is very uncertain due to fish prices and fish runs. Table 5-2 shows the projected breakdown of state and municipal shares.

Insurance Premium Tax

Insurance companies in Alaska pay an insurance premium tax instead of corporate income tax, sales, or other excise taxes. The tax is levied as a percentage of the total insurance premiums for policies in the state of Alaska.

Insurance premium taxes on workers' compensation insurance are deposited into a subfund of the general fund, the Workers' Safety and Compensation Fund, and are reflected as restricted in this forecast. The restricted component also includes service fees paid

into the Workers' Safety and Compensation Fund by employers who are uninsured or self-insured.

Prior to FY 2017, remaining insurance premium taxes were considered unrestricted revenue. For FY 2017 and FY 2018, though, remaining insurance premium taxes were deposited into a subfund of the general fund, the Alaska Comprehensive Health Insurance Fund, and are reflected as restricted in this forecast. However, in FY 2019, these funds again revert to unrestricted revenue.

To forecast insurance premium tax revenue, the Department of Revenue consults with the Alaska Department of Commerce, Community, and Economic Development's Division of Insurance, which administers the insurance premium tax, and the Alaska

Department of Labor and Workforce Development's Workers' Compensation Division, which collects workers' compensation service fees.

The Department of Revenue also considers the historical growth rate of the insurance premium tax, which has been one of Alaska's faster-growing sources of revenue, likely due to expansion of the insurance industry.

Marijuana Tax

Voters approved a ballot measure in November 2014 that legalized the sale and use of marijuana for recreational purposes. The ballot measure also levied a new tax on the sale of marijuana. The tax rate is \$50 per ounce on marijuana buds/flowers and \$15 per ounce on other parts of the plant. The tax is paid by marijuana cultivators and is due the month after the sale of the product to a retail marijuana store or marijuana product manufacturing facility.

The ballot measure took effect in February 2015, and the Department of Revenue collected the first tax revenue from legal marijuana cultivators in the second quarter of FY 2017. Half the revenue from the marijuana tax is deposited into a subfund of the general fund, the Recidivism Reduction Fund, and is treated as restricted for purposes of this forecast. Beginning in October 2018, an additional 25% of marijuana tax revenue is deposited into the Marijuana Education and Treatment Fund and is also treated as restricted for purposes of this forecast. The remaining 25% of marijuana tax revenue is considered unrestricted revenue.

The revenue from marijuana taxes has grown steadily but remains unpredictable because of uncertainty about the ultimate potential size of the legal marijuana market.

The department continues to provide a general forecast of marijuana tax revenue based on the experiences of Colorado and Washington, states that legalized recreational marijuana two years earlier than Alaska did. Revenue numbers from Colorado and Washington are scaled to account for Alaska's population, the slower pace of marijuana business license approvals, and the appropriate tax rate.

Mining License Tax

The mining license tax ranges from 0% to 7% of the net income of most mining operations in the state. New mining operations are exempt from the tax for a 3½-year period after production begins. Sand and gravel operations are similarly exempt from the tax.

This forecast uses a bottom-up approach to estimate tax payments for each of the major mines in the state based on expected minerals prices and production.

Gold, zinc, and silver play the largest role in mining tax, as the largest mines in the state rely heavily on those three metals.

Because of the volatility in metal prices, the mining tax is one of the most difficult to forecast. The revenue forecast for mining license tax relies on the most recent metals price predictions available from commodity futures markets.

Motor Fuel Tax

The motor fuel tax is imposed on motor fuel sold, transferred, or used within Alaska. Motor fuel taxes are collected primarily from wholesalers and distributors licensed as qualified dealers.

Various fuel uses are exempt from tax, including fuel used for heating or international flights.

Per-gallon rates are \$0.08 for highway use, \$0.05 for marine fuel, \$0.047 for aviation gasoline, \$0.032 for jet fuel, and \$0.08 or \$0.02 for gasohol, depending on the season, location, and U.S. Environmental Protection Agency mandate.

The federal government requires that all aviation fuel tax revenue be used in direct support of the airports where the revenue is generated. As a result, both aviation gasoline and jet fuel revenue are shown as other restricted revenue. This includes the 60% of revenue attributable to aviation fuel sales at municipal airports that is shared with the respective municipalities.

Beginning in FY 2018, remaining motor fuel tax revenue is considered designated in the budget process, as AS 43.40.010 designates motor fuel taxes for specific infrastructure maintenance accounts.

The Division of Legislative Finance, an Alaska legislative agency, reviewed the relevant statutory language and determined that motor fuel tax had been incorrectly classified as unrestricted revenue for budget purposes in the past. As a result, Legislative Finance determined that the tax should be classified as designated; the Office of Management and Budget in the Governor's Office concurred. The Department of Revenue reclassified motor fuel taxes beginning with FY 2018 (with no retroactive change) for consistency with the change in the budget process.

In 2016, the Legislature altered the motor fuel tax to include a refined fuel surcharge, sometimes called the conservation surcharge, of \$0.0095 per gallon on

non-aviation fuel as well as certain non-motor fuels such as home heating oil. The surcharge revenue goes to the Alaska Department of Environmental Conservation's Spill Prevention and Response Division. Municipalities and certain cooperatives are exempt from the charge. The surcharge is shown as unrestricted revenue in both years in this forecast.

In the past, the motor fuel tax has been one of State of Alaska's less volatile sources of revenue. Table 5-2 shows the projected breakdown of the different components, including aviation fuel, non-aviation fuel, and the conservation surcharge.

Seafood Assessments and Taxes

The Department of Revenue administers five different programs that collect funds through seafood assessments and taxes. The rates for these assessments and taxes are determined by a vote of the appropriate association within the seafood industry, by members of the Alaska Seafood Marketing Institute, or by the department. The five programs are:

- The seafood marketing assessment, which applies to all seafood products made or first landed in Alaska and all unprocessed products exported from Alaska. It is currently a 0.5% assessment and supports the operations of the Alaska Seafood Marketing Institute.
- The dive fishery management assessment is levied on the value of fishery resources taken using dive gear in a designated management area. The current assessment rate is 5% for sea cucumbers and 7% for geoducks and sea urchins. Dive fishery taxes are based on the value of the fishery in the prior fiscal year.
- The regional seafood development tax, which is levied on the value of fishery resources in a designated management area. The current tax rate is 1% and covers drift and set gillnet operations in Prince William Sound, as well as drift gillnet operations in Bristol Bay. Seafood development tax revenue is based on the estimated taxable value of seafood processed in Alaska.
- The salmon enhancement tax is levied on salmon sold or exported from designated aquaculture regions. The rate varies from 2% to 3% by location.
- The common property fishery assessment, authorized in 2006, allows hatcheries to establish a cost-recovery fishery and recoup costs through an assessment on fishery resources

taken in the terminal harvest area. The program was first used in 2012 for the Hidden Falls hatchery in Southeast Alaska.

The revenue received under these five assessments and taxes is deposited in the general fund, and it is treated as other restricted revenue in this forecast. It is set aside for appropriation for the benefit of the seafood industry, either in marketing, or for management and development of the industry.

The department uses the estimated taxable value of Alaska's salmon fishery, and historical effective tax rates to forecast salmon enhancement tax revenue. The department forecasts other seafood assessments and taxes using the same estimates of fisheries values developed for the fisheries business and landing taxes. Table 5-2 shows the projected breakdown of the different seafood assessments and taxes.

Tire Fee

The tire fee has two components. The first component is a fee of \$2.50 on all new tires sold in Alaska for motor vehicles intended for highway use. The second component is an additional \$5 fee per tire on all new tires with heavy studs sold in Alaska, and a \$5 fee per tire on the installation of heavy studs on a previously un-studded tire.

Tires sold to federal, state, or local government agencies for official use are exempt from the fee, as well as certain tires with lightweight studs. The department forecasts the tire fee based on the historical growth rate of revenue.

Tobacco Tax

Alaska levies a tax on cigarettes and other tobacco products. The cigarette tax, one component of the tobacco tax, is levied on cigarettes imported into the state for sale or personal consumption. A second component of the tax, the other tobacco products tax, is levied on tobacco products (other than cigarettes) imported into the state for sale.

Both components of the tobacco tax are collected primarily from licensed wholesalers and distributors.

The tax rate on cigarettes has been \$2.00 per pack since July 1, 2007. Of that, \$0.76 per pack is deposited into the School Fund, and is considered designated restricted revenue.

Money deposited into the School Fund is to be used for the rehabilitation, construction, repair, and associated insurance costs of state school facilities.

Fines and Forfeitures

By restriction

	Millions of Dollars		
	History	Forecast	
Fiscal Year	2018	2019	2020
<u>Unrestricted</u>			
Unrestricted Revenue from Fines and Forfeitures	12.5	12.5	12.5
<u>Restricted</u>			
Designated General Fund			
Tobacco Settlement (Tobacco Use Education and Cessation Fund)	10.1	3.7	4.1
Other – General Fund Subfunds	0.9	0.9	0.9
Subtotal Designated General Fund	11.0	4.5	5.0
Other Restricted			
Tobacco Settlement (Northern Tobacco Securitization Corporation)	40.5	14.7	16.5
Other – Special Revenue Funds	0.1	0.1	0.1
Subtotal Other Restricted	40.6	14.8	16.6
Restricted Revenue from Fines and Forfeitures	51.6	19.4	21.6
Total Revenue from Fines and Forfeitures	64.1	31.9	34.1

All cigarette and tobacco products license fees are also deposited into the School Fund, and they are considered designated restrictive revenue as well.

The remainder of the cigarette tax revenue (\$1.24 per pack) is deposited into the general fund. Of that, 8.9% (\$0.11 per pack) is deposited into a subfund of the general fund, the Tobacco Use Education and Cessation Fund, and is treated as designated restricted revenue.

The tax rate on other tobacco products, such as cigars and chewing tobacco, is 75% of the wholesale price and is deposited entirely in the general fund. It is unrestricted revenue.

Certain cigarettes and tobacco are exempted from the tax – those that are (1) transported into the state by an individual for personal consumption, (2) imported or acquired by one of the U.S. uniformed services, or (3) imported or acquired by federally recognized Indian tribes.

More specifically, for (2) and (3), sales to authorized military personnel by a military exchange, commissary, or ship store, and sales by an Indian reservation business located within an Indian reservation to members of the reservation are not subject to the tax.

The Department of Revenue's forecast for cigarette tax revenue is based on past rates of decline in cigarette consumption. In recent years, the total number of cigarettes purchased in Alaska has fallen by about 20 million per year, translating to a roughly \$2 million yearly decline in total cigarette tax revenue. The department projects that cigarette tax revenues will continue to decline in the future.

The revenue from other tobacco products is projected to rise due to moderate increases in both wholesale prices and consumption levels.

Typically, tobacco taxes are one of the state of Alaska's least volatile sources of revenue, so there is not much uncertainty in the forecasts. Table 5-2 shows the projected breakdown of the tobacco tax, including the other tobacco products tax, and the unrestricted versus restricted portions of the cigarette tax.

Vehicle Rental Tax

Vehicle rental tax is a 10% tax on most passenger vehicle rentals of 90 days or less, and a 3% tax on rentals of recreational vehicles for 90 days or less.

Revenue from Licenses and Permits

By restriction and source

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020
<u>Unrestricted</u>			
Unrestricted Revenue from Licenses and Permits			
Motor Vehicles	36.3	36.3	36.3
Other Fees	0.8	2.8	2.8
Total Unrestricted Revenue from Licenses and Permits	37.1	39.1	39.1
<u>Restricted</u>			
Designated General Fund			
Other Fees – General Fund Subfunds	1.1	1.1	1.1
Other Restricted			
Alcoholic Beverage License Share	0.9	0.9	0.9
Hunting and Fishing Fees (Fish and Game Fund)	35.6	35.9	36.2
Other Fees – Special Revenue Funds	3.6	3.6	3.6
Subtotal Other Restricted	40.1	40.4	40.6
Total Restricted Revenue from Licenses and Permits	41.2	41.5	41.7
Total Revenue from Licenses and Permits	78.2	80.5	80.8

Exemptions include taxis, rentals to government agencies, and trucks used for transporting personal property.

Revenue from the vehicle rental tax is deposited into a special vehicle rental tax account within the general fund. The Legislature may appropriate the balance of that account for tourism development and marketing, which it typically does.

Revenue from the vehicle rental tax is projected based on GDP growth, since most vehicle renters are tourists and tourism increases when the national economy is strong. Vehicle rental tax revenue is expected to increase modestly unless there is an economic downturn.

Charges for Services

The charges for services category includes fees and other program charges for state services. Revenues reported in this category do not include all charges for state services. This category only includes those

services that do not fit into other categories in this report.

Most of these receipts are considered restricted revenue because they are returned to the program where they were generated. The only unrestricted revenue listed in this category comes from charges that do not have program receipt designations, or are not otherwise segregated and appropriated back to a program.

Many of the charges for services are small amounts that the department has grouped into the broad categories “general government,” “natural resources” and “other.” Estimates for these categories are based on fiscal year-to-date collections and historical averages. The largest categories of charges for services are listed separately and are discussed below.

Marine Highway Fund

The Alaska Marine Highway Fund is a subfund of the general fund and receives revenue from state ferry system operations. Because revenue is customarily

appropriated for Alaska Marine Highway operations, it is considered restricted revenue for this forecast. Revenue projections are based on revenue expectations provided by the Alaska Marine Highway Division within the Alaska Department of Transportation and Public Facilities.

Environmental Compliance Fund

Commercial passenger vessel fees paid into the Environmental Compliance Fund come from two sources: Ocean Ranger Program fees, and environmental compliance fees. All fees paid into the fund are considered restricted for purposes of this forecast and are based on estimated cruise ship passenger levels.

The Ocean Ranger fee is levied on each voyage in Alaska by commercial passenger vessels with 250 or more berths at a rate of \$4 per berth. The fee is levied to support the Ocean Ranger Program, which provides for independent observers of engineering, sanitation and health practices aboard the vessels. This fee was imposed as part of a broader commercial passenger vessel-related initiative passed by Alaska voters in August 2006.

Environmental compliance fees are levied on commercial passenger vessels with more than 50 berths. Fees range from \$75 to \$3,750 per vessel based on the number of berths, and funds are used to support environmental compliance programs. Both Ocean Ranger fees and environmental compliance fees are reflected as other restricted revenue to conform with budget documents. Previously, both of the fees have been shown as designated general fund.

Program Receipts

Under AS 37.05.142 – 37.05.146, receipts from authorized state programs are accounted for separately and appropriated to administer and implement laws related to the particular program, or to cover costs associated with collecting the receipts. Some programs with program receipt authority are not included in the Department of Revenue's Charges for Services category because they are reported elsewhere in this forecast or because they do not generate revenue available for general appropriation.

Expected revenue from program receipts are based on discussions with the Governor's Office of Management and Budget, and analysis of the most recent budget expectations for these categories.

Program receipts listed in this section are:

- Receipt-supported services, which include state services such as Alaska Pioneer Homes

and occupational licensing funded by program receipts.

- Statutorily designated program receipts, which include money received from sources other than the state or federal government and restricted by the terms of a gift, grant, bequest, or contract.
- Regulatory Commission of Alaska receipts, which are regulatory cost charges and user fees levied on utilities and pipelines to fund costs of regulation.
- Timber sale receipts, which are used to fund the timber disposal program of the Alaska Department of Natural Resources.
- Oil and Gas Conservation Commission receipts, which are fees and charges for regulation of oil and gas wells and pipelines.
- Business license fees collected by the Alaska Department of Commerce, Community, and Economic Development.

Fines and Forfeitures

Fines and forfeitures include civil and criminal fines and forfeitures, as well as money received by the state from the settlement of civil lawsuits. The largest single source of receipts under this category is the multi-state tobacco settlement often referred to as the Master Settlement Agreement. Other sources are forecast based on fiscal year-to-date collections and historical averages.

Tobacco Settlement

The tobacco Master Settlement Agreement was signed by 46 states, including Alaska, in November 1998 and dictates annual payments to each of the states. Eighty percent of the settlement revenue is earmarked for the Northern Tobacco Securitization Corporation (NTSC) for payments on bonds that were sold based on the future revenue stream. The revenue for these bonds is considered other restricted revenue. The remaining 20% of the revenue is deposited into the Tobacco Use Education and Cessation Fund, a subfund of the general fund, and the 20% is considered designated general fund revenue.

Tobacco settlement payments are based on a complex formula that takes into account several factors, including declines in cigarette consumption, inflation, and certain adjustments for litigation expenses and market share losses related to the settlement.

Revenue from Rents and Royalties

By restriction and source

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020
<u>Unrestricted</u>			
Unrestricted Revenue from Rents and Royalties			
Mining Rents and Royalties	1.9	1.9	1.3
Other Non-Petroleum Rents and Royalties	3.8	3.8	3.8
Total Unrestricted Revenue from Rents and Royalties	5.8	5.7	5.1
<u>Restricted</u>			
Designated General Fund			
Mining Rents and Royalties	10.2	10.0	6.7
Other Non-Petroleum Rents and Royalties	11.1	11.1	11.1
Other Restricted			
Mining Rents and Royalties	4.3	4.2	8.4
Other Non-Petroleum Rents and Royalties	2.2	2.2	2.2
Total Restricted Revenue from Rents and Royalties	27.8	27.5	28.4
Total Revenue from Rents and Royalties	33.5	33.2	33.5

In FY 2017, Alaska received the last payments from the Strategic Contribution Fund (SCF) portion of the settlement, which had been paid since FY 2008. The SCF payment was intended to reflect Alaska’s level of contribution toward final resolution of the state lawsuits against the tobacco companies. The SCF payments were made to Alaska based on a separate formula than the Master Settlement Agreement, but were appropriated based on the same split as regular payments.

In late FY 2018, Alaska reached an agreement with the manufacturers participating in the Master Settlement Agreement on payments that had been withheld by the manufacturers since 2004. This accounts for a large increase in revenue in FY 2018. Under the agreement, the state’s payments will be reduced by approximately \$2.1 million per year for FY 2019 - FY 2022. The amount received under the settlement apart from one-time items is gradually declining as smoking decreases.

Licenses and Permits

Licenses and permits represent revenue derived from charges for participating in activities regulated by the state. The majority of the receipts under this category are from motor vehicle registration and fishing and

hunting license fees. Several other small license and permit fees are summarized in the other fees category.

Alcoholic Beverage Licenses

Alcoholic beverage licenses are required to manufacture or sell alcoholic beverages in Alaska, and are issued by the Alcoholic Beverage Control Board within the Department of Commerce, Community, and Economic Development.

All the revenue from biennial license fees collected within municipalities – excluding annual wholesale fees and biennial wholesale license fees – is shared with the municipalities and treated as other restricted revenue for purposes of this forecast. The remaining revenue (annual wholesale fees and biennial wholesale license fees) is treated as designated general fund revenue, as these funds are considered program receipts supporting the service of issuing alcoholic beverage licenses.

Hunting and Fishing License Fees

Hunting and fishing licenses are issued by the Alaska Department of Fish and Game for participation in various hunting, fishing, and other related activities. The

majority of this revenue is appropriated to a special revenue fund called the Fish and Game Fund, and is classified as other restricted revenue. Money in the fund can only be spent for fish and game management purposes. The Department of Fish and Game provides the forecasts of revenue from hunting and fishing license fees.

Hunting and fishing license fees are expected to increase substantially because of House Bill 137, which passed during the 2016 legislative session and raised the fees for a variety of licenses and big-game tags. The law took effect Jan. 1, 2017, and thus impacted the second half of FY 2017 and all of FY 2018. Revenue from these fees rose significantly from FY 2017 to FY 2018, but is projected to level out with no further changes in statute.

Motor Vehicle Registration Fees

Motor vehicle registration fees are collected by the Division of Motor Vehicles within the Department of Administration. Most fees are considered unrestricted license and permit revenue; however, some registration fees are considered restricted receipt-supported services and are reflected in the Charges for Services section above. Historical and forecasted revenue from motor vehicle registration fees is based on data that the Division of Motor Vehicles provides.

Rents and Royalties

Rents and royalties from sources other than oil and gas fall into two categories: mining rents and royalties, and other non-petroleum rents and royalties. All rents and royalties from oil and gas are reported in Chapter 4, Petroleum Revenue.

Mining Rents and Royalties

As with oil and gas production, the state earns revenue from other mineral production that occurs on state lands leased for exploration and development. As the landowner, the state earns revenue from leases as: (1) up-front bonuses, (2) annual rent charges, and (3) as a retained royalty interest in mineral production.

Revenue received from mining rents and royalties is deposited as follows: between 25% and 50% into the Permanent Fund, 0.5% into the Public School Trust Fund, and the remainder into the general fund, which is treated as unrestricted revenue. The Permanent Fund and Public School Trust Fund portions are treated as other restricted revenue.

The Department of Revenue forecasts revenue from mining rents and royalties based on an average of the

revenue in recent years. In FY 2018 and FY 2019, only 25% of royalties will be deposited to the Permanent Fund; this forecast assumes that 50% of most mining royalties will be deposited in FY 2020 and beyond.

Other Non-Petroleum Rents and Royalties

The state receives revenue from the leasing, rental, and sale of state land. While all this revenue is deposited into the general fund, some is deposited into sub-funds of the general fund and is treated as designated general fund revenue, which is restricted for purposes of this forecast. This category includes revenue from leasing, rental, and the sale of state land that does not fall into the oil and gas or mining royalty categories. Other non-petroleum rents and royalties are based on the analysis of fiscal year-to-date and historical collections.

Miscellaneous and Transfer Revenues

This category includes unclaimed property transfers, transfers to the state from component organizations, and miscellaneous revenue. Projections of miscellaneous revenue, which include contributions to the state and other revenue, are based on the analysis of fiscal year-to-date and historical collections. Unclaimed property, transfers from component organizations, and transfers from state funds are discussed below.

Unclaimed Property

Alaska's unclaimed property statutes require businesses and corporations to report unclaimed intangible property to the state. Property is reportable if an owner cannot be located, the owner has not cashed a property check, or an account has not had any owner-initiated activity for at least three years. Unclaimed property may include checking accounts, customer deposits and over-payments, gift certificates, unpaid wages, and security-related accounts. The state holds the property in trust until the owner or his or her legal heir claims it. Each year the unclaimed property trust account is evaluated and the excess of the working trust balance is transferred to the general fund.

Transfers from Component Organizations

Each year, the state receives money in the form of transfers from component organizations, such as the Alaska Housing Finance Corporation, and the Alaska Industrial Development and Export Authority,

Miscellaneous and Transfer Revenues

By restriction and source

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020

Unrestricted

Unrestricted Miscellaneous and Transfer Revenue

Miscellaneous	36.9	23.5	22.5
Alaska Capital Income Fund ¹	43.0	0.0	0.0
Alaska Housing Finance Corporation ²	18.4	17.4	17.4
Alaska Industrial Development and Export Authority ²	12.9	12.0	12.0
Alaska Municipal Bond Bank Authority	0.0	0.0	0.0
Alaska Student Loan Corporation	0.0	0.0	0.0
Alaska Energy Authority	0.0	0.0	0.0
Mental Health Trust	0.0	0.0	0.0
Unclaimed Property	20.0	16.8	18.0
Total Unrestricted Miscellaneous and Transfer Revenue	131.2	69.7	69.9

Restricted

Designated General Fund

Miscellaneous – General Fund Subfunds ³	16.9	16.9	16.9
Alaska Capital Income Fund ¹	0.0	27.0	27.0
Subtotal Designated General Fund	16.9	43.9	43.9

Other Restricted

Miscellaneous – Special Revenue Funds ³	21.1	21.1	21.1
Total Restricted Miscellaneous and Transfer Revenue	38.0	65.0	65.0

Total Miscellaneous and Transfer Revenue	169.2	134.7	134.9
---	--------------	--------------	--------------

¹ Beginning with FY 2019, transfer revenue from the Alaska Capital Income Fund is considered designated general fund revenue.

² The AIDEA and AHFC dividends for FY 2019 are estimates as of Nov. 9, 2018; they will be revised in the *Revenue Sources Book's* spring 2019 update.

³ These funds represent revenue shown under account codes for "other" or "contributions" in the Alaska State Accounting System for general fund subfunds and special revenue funds.

frequently in the form of dividends. Component organizations are covered in more detail in Chapter 10. Some component organizations do not make transfers to the state, and, as a result, not all component organizations are listed here.

Estimates of FY 2018 transfers, and forecasts for FY 2019 and FY 2020 transfers are based on discussions with the Office of Management and Budget, and analysis of the most recent budget expectations for these categories. The forecasts for the component organizations are found in Table 5-8.

Transfers from component organizations presented under this category may differ from those presented in Chapter 10 for two reasons: (1) amounts in this section account differently for funds paid over time for multi-year capital projects, and (2) amounts in this section include funds that are transferred to the state and then appropriated to the component unit for operations.

Transfers from State Funds

In FY 2018, transferred earnings of the Alaska Capital Income Fund were shown as unrestricted revenue. The Alaska Capital Income Fund is invested alongside the Alaska Permanent Fund, and in FY 2018, the earnings of the Alaska Capital Income Fund were transferred to the general fund for general appropriation. For FY 2019 and beyond, transferred earnings are designated for deferred maintenance purposes and are shown as designated general fund revenue. These changes have been made for consistency with budget documents, in consultation with the Legislative Finance Division, and Office of Management and Budget.



Chapter 6 Federal Revenue

General Discussion

In fiscal year 2018, the State of Alaska received \$3.1 billion in federal funds, constituting 25% of total state revenue.

This federal funding is considered restricted, as it is required to be used for specific purposes such as road improvements, Medicaid payments, and aid to schools. Potential changes to federal law, differing federal and state fiscal years, and varying numbers of eligible Alaskans in certain programs make forecasting federal revenue difficult.

Forecast

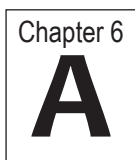
Estimates of FY 2019 and FY 2020 receipts come from the Office of Management and Budget in the Govern-

or's Office and are based on state agency projections of potential federal revenue. Table 6-1 provides actual FY 2018 receipts and the forecasts for FY 2019-2020.

During FY 2019, the State of Alaska is authorized to receive \$3.8 billion in federal funds.

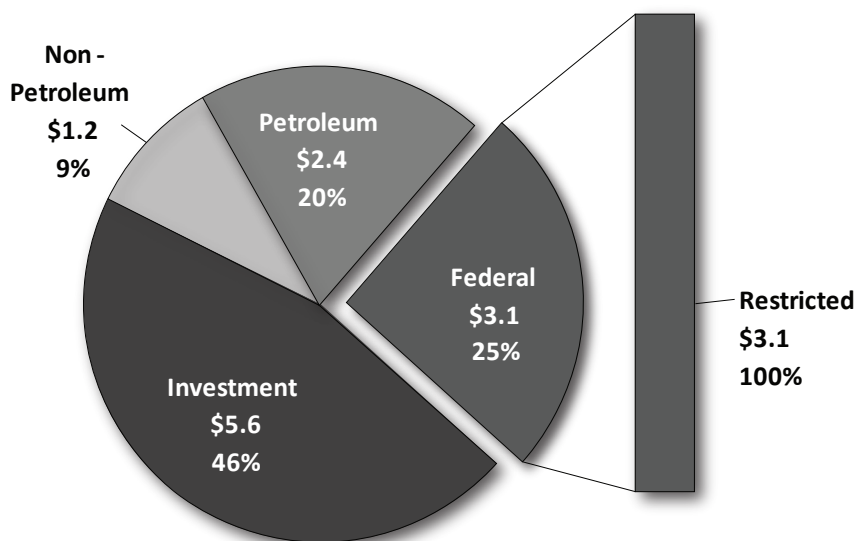
Consistent with state budget protocol and past practice, the federal revenue forecast represents the total authorization – actual revenue will likely come in below these forecasts.

The Alaska Legislature authorizes state agencies to receive and spend the maximum that federally funded programs might receive, while actual appropriation amounts are historically somewhat lower. Also, some of the funding for multi-year capital projects is received and spent in years following the year that



FY 2018 Federal Revenue

By restriction and type, in billions of dollars



Total Federal Revenue to the State

FY 2018 and forecasted FY 2019 – FY 2020

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020

Unrestricted General Fund

Federal Receipts	0.0	0.0	0.0
------------------	-----	-----	-----

Restricted (Federal)

Federal Receipts Authorization ¹	3,098.9	3,780.8	3,780.8
---	---------	---------	---------

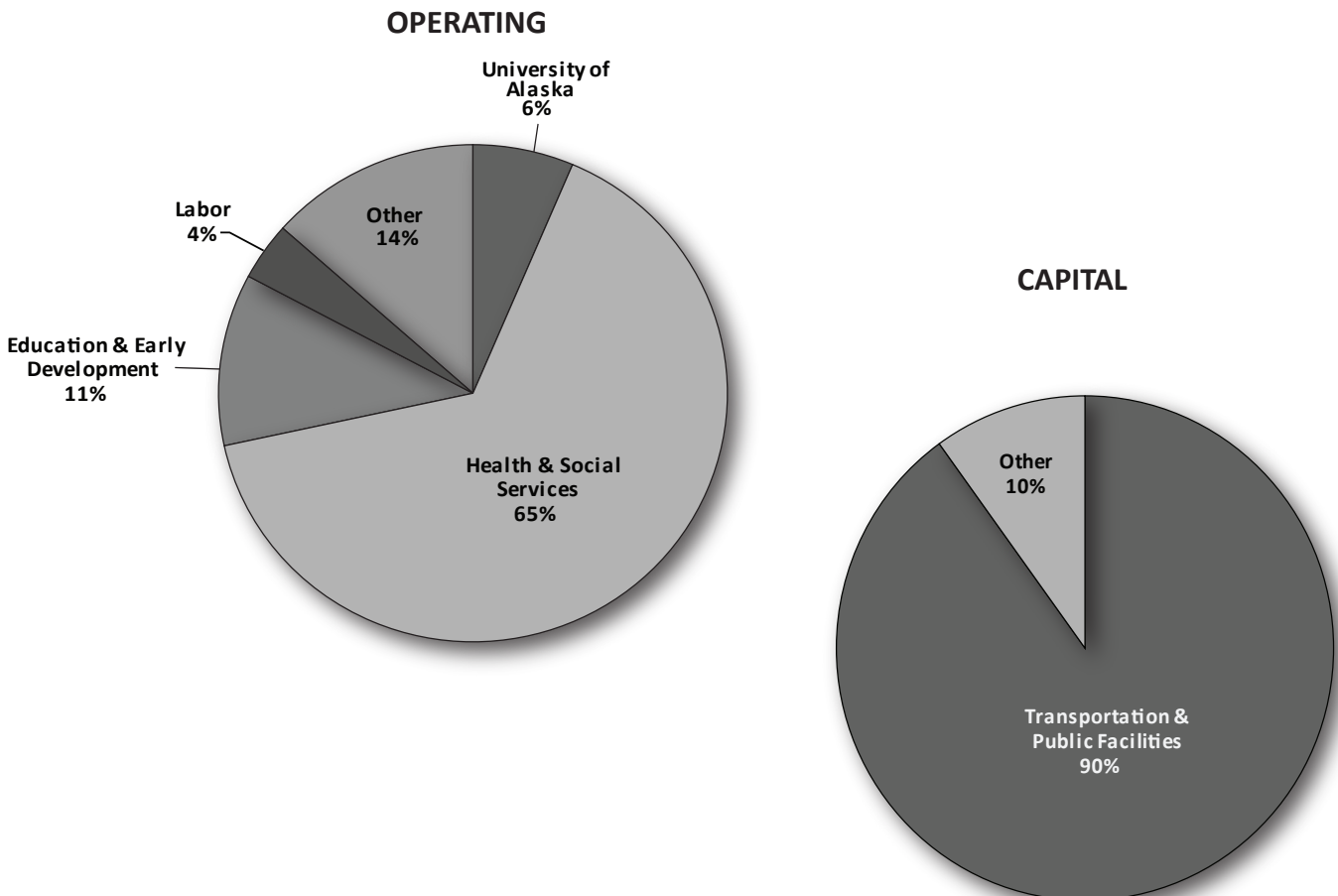
Total Federal Revenue

3,098.9	3,780.8	3,780.8
----------------	----------------	----------------

¹This amount includes federal receipts other than Alaska's share of the royalties from the National Petroleum Reserve – Alaska, which are presented in Chapter 2.

FY 2018 Federal Revenue Allocation

Revenue in operating and capital budgets, by recipient agency



the money was procured. All federal funds, whether spent in the operating or capital budget, are limited in how they may be used; therefore, they are shown as restricted revenue.

State Matching

Most federal funding requires state matching. Across state agencies, in FY 2018, Alaska was authorized to spend \$818 million in matching funds and to receive \$3.1 billion in federal revenue. This means Alaska received roughly \$3.79 in federal funds for each dollar it was authorized to spend in matching state funds. Authorized matching funds included \$736 million in the operating budget and \$82 million in the capital budget.

Distribution of Restricted Revenue

Of the federal funds the state was authorized to receive in FY 2018, 67% (\$2.4 billion) was authorized to go into the operating budget and the remaining 33%

(\$1.2 billion) was authorized to go into the capital budget.

The Alaska Department of Health and Social Services was authorized to receive 48% of the total federal funds (\$1.7 billion out of \$3.6 billion), making it the largest destination for federal funds within the budget. This amount includes federal Medicaid funding.

In the capital budget, the Alaska Department of Transportation and Public Facilities was the dominant destination for federal funds. The department was authorized to receive about 30% of total federal funds (\$1.1 billion total) in FY 2018.

Figure 6-B illustrates a detailed distribution of federal funds the state was authorized to receive; the distribution of funds actually received may differ slightly.

This page was intentionally left blank.



Chapter 7

Investment Revenue

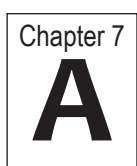
Overview

Total investment revenue for fiscal year 2018 was approximately \$5.6 billion, with nearly all of it classified as restricted revenue as shown in Figure 7-A. Table 7-1 shows investment returns forecasted for the next two fiscal years; this forecast is based on assumptions of projected returns and growth in the value of equities and other investments.

To forecast investment revenue, the Department of Revenue combined actual performance through Sept. 30, 2018, with a projection for the remainder of the fiscal year. Forecasts and capital-market median returns are based on information given in the five- to

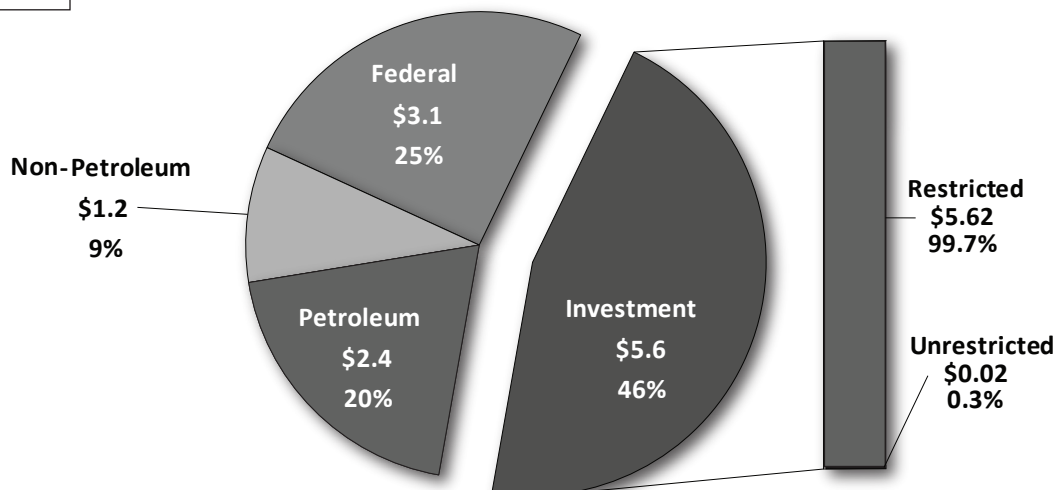
10-year capital-market returns projection, provided by the state's investment consultant, Callan Associates, Inc.

Table 7-2 shows a summary of Callan's long-term capital-market projections, as well as the benchmark against which performance for a specific asset class is measured in the state portfolios. The column titled "Projected Return" is the estimated annual rate of return. The numbers in the "Projected Risk" column represent a statistical measure called standard deviation, which is the most commonly used measure of risk in the investment world. The standard deviation is a measure of the dispersion of data around its mean.



FY 2018 Investment Revenue

By restriction and type, in billions of dollars



Total Investment Revenue¹

By restriction and detail, in millions of dollars

	Millions of Dollars		
	History	Forecast	
Fiscal Year	2018	2019	2020
<u>Unrestricted</u>			
Unrestricted Investment Revenue			
Investments	16.3	72.4	82.4
Alaska Permanent Fund	–	2,723.0	2,933.1
Total Unrestricted Investment Revenue	16.3	2,795.4	3,015.5
<u>Restricted</u>			
Designated General Fund Revenue			
Investments – Designated General Fund ²	1.8	7.0	7.4
Other Treasury-Managed Funds	38.3	14.2	40.1
Subtotal Designated General Fund	40.1	21.2	47.5
Other Restricted			
Investments – Other Restricted	3.6	14.1	15.0
Constitutional Budget Reserve Fund	47.2	51.0	74.5
Alaska Permanent Fund ³	5,525.5	891.4	1,132.8
Subtotal Other Restricted Revenue	5,576.3	956.5	1,222.3
Total Restricted Investment Revenue	5,616.4	977.7	1,269.7
Total Investment Revenue	5,632.7	3,773.1	4,285.2

¹ Governmental Accounting Standards Board (GASB) principles require the recognition of changes in the value of investments as income or losses at the end of each trading day, whether the investment is actually sold or not.

² Includes subfunds of the general fund.

³ Starting in FY2019, Alaska Permanent Fund restricted revenue is total realized and unrealized gains, less the unrestricted revenue due to the transfer to the general fund.

The analyst can use the standard deviation to provide a range of possible outcomes at any desired level of confidence. With a bell-curve (normal) distribution, approximately 68% of the observed outcomes are expected to be one standard deviation from the mean. A greater level of confidence (for instance, 95%) would require a broader range (two standard deviations).

For example, Callan estimates an average annual return for the Domestic Fixed Income asset class of 3.00% and a projected risk for that asset class of 3.75%. That means Callan is forecasting, with a normal distribution, the annual return for the Domestic Fixed Income asset class between -0.75% and 6.75% (one

standard deviation). A prediction at 95% confidence would run from -4.50% to 10.50% (plus or minus two standard deviations from the mean), and is too broad a range to be useful. The probability that a particular asset class or portfolio will have a negative return over a given period of time reflects the downside risk of the asset class or portfolio.

Unrestricted and Restricted Investment Revenue

“Unrestricted investment revenue” is earned on some of the funds invested through the GeFONSI (general fund and other non-segregated investments) pool.

2018 Summary of Callan Associates, Inc.

Long-term capital market projections

Asset Class	Benchmark for Asset Class	Projected Return: 10-Year Geometric ¹	Projected Risk: Standard Deviation	Projected Return within One Standard Deviation (Percentage)						
				-30	-20	-10	0	10	20	30
Equities										
Broad Domestic Equity	Russell 3000	6.85%	18.25%	[Bar chart showing distribution from approx -10% to 25%]						
Large Cap	S&P 500	6.75%	17.40%	[Bar chart showing distribution from approx -10% to 25%]						
Small / Mid Cap	Russell 2500	7.00%	22.60%	[Bar chart showing distribution from approx -10% to 35%]						
Global ex-US Equity	MSCI ACWI ex USA	7.00%	21.00%	[Bar chart showing distribution from approx -10% to 35%]						
International Equity	MSCI World ex USA	6.75%	19.70%	[Bar chart showing distribution from approx -10% to 35%]						
Emerging Markets Equity	MSCI Emerging Markets	7.00%	27.45%	[Bar chart showing distribution from approx -10% to 40%]						
Fixed Income										
Domestic Fixed	Bloomberg Barclays Aggregate	3.00%	3.75%	[Bar chart showing distribution from approx 0% to 10%]						
High Yield	Bloomberg Barclays High Yield	4.75%	10.35%	[Bar chart showing distribution from approx 0% to 20%]						
Short Duration	Bloomberg Barclays 1-3 Yr G/C	2.60%	2.10%	[Bar chart showing distribution from approx 0% to 10%]						
TIPS	Bloomberg Barclays TIPS	3.00%	5.25%	[Bar chart showing distribution from approx 0% to 15%]						
Non-U.S. Fixed	Bloomberg Barclays Global Aggregate ex USD	1.40%	9.20%	[Bar chart showing distribution from approx 0% to 20%]						
Emerging Market Debt	EMBI Global Diversified	4.50%	9.60%	[Bar chart showing distribution from approx 0% to 20%]						
Other										
Private Equity	TR Post Venture Cap	7.35%	32.90%	[Bar chart showing distribution from approx -10% to 40%]						
Real Estate	Callan Real Estate Database	5.75%	16.35%	[Bar chart showing distribution from approx -10% to 25%]						
REITs	FTSE NAREIT All Equity	6.50%	20.70%	[Bar chart showing distribution from approx -10% to 35%]						
Hedge Funds	Callan Hedge FoF	5.05%	9.15%	[Bar chart showing distribution from approx 0% to 15%]						
Commodities	Bloomberg Commodity	2.65%	18.30%	[Bar chart showing distribution from approx -10% to 25%]						
Cash Equivalents	90-Day T-Bill	2.25%	0.90%	[Bar chart showing distribution from approx 0% to 10%]						
Inflation	CPI-U	2.25%	1.50%	[Bar chart showing distribution from approx 0% to 10%]						

¹ Geometric returns are derived from arithmetic returns and associated risk (standard deviation).

General Fund Investment Pool Revenue

Non-segregated investments invested alongside general fund

	Millions of Dollars		
	History 2018	Forecast 2019 2020	
<u>Unrestricted</u>			
Unrestricted Investment Revenue	16.3	72.4	82.4
<u>Restricted</u>			
Restricted Investment Revenue			
Designated General Fund ¹	1.8	7.0	7.4
Investments – Other Restricted	3.6	14.1	15.0
Total	21.7	93.5	104.7

¹ Includes subfunds of the general fund.

General Fund Investment Pool

GeFONSI I, asset allocation and summary

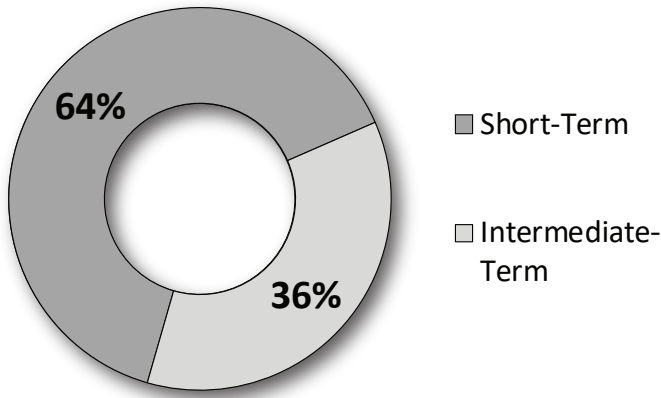
Treasury Pool	Target Percent Allocation	Performance Benchmark
Short-term Fixed Income Pool	64%	Three-month U.S. Treasury Bill
Intermediate-Term Fixed Income Pool	36%	Barclays 1-3 Year Gov't Bond Index
Bank Bonds	0%	Allocation up to 2%
T-Bills, T-Notes, T-Bonds or Federal Agency Debentures	0%	Allocation up to 2%
Broad Fixed Income Pool	0%	Allocation up to 10%
Invested Assets as of Sept. 30, 2018	\$2,022.6	million
Long-Term Expected Rate of Return	2.38%	Callan's returns
Probability of Negative Return Over One Year	1.36%	

Note: GeFONSI is an acronym for general fund and other non-segregated investments.

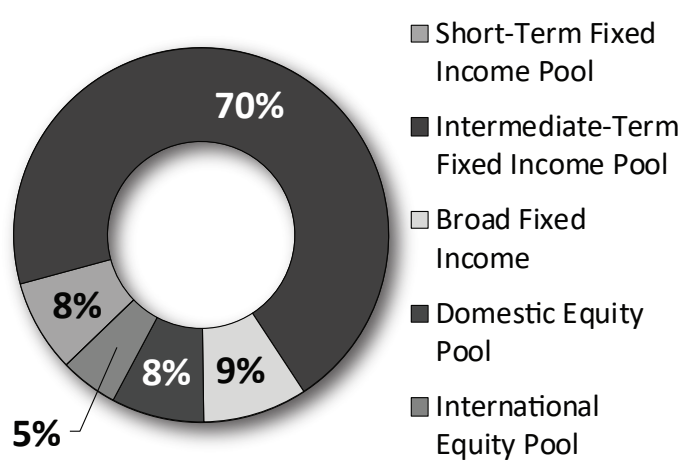
General Fund Investment Pool

GeFONSI I and II, asset allocation

GeFONSI I



GeFONSI II



General Fund Investment Pool

GeFONSI II, asset allocation and summary

Treasury Pool	Target Percent Allocation	Performance Benchmark
Short-Term Fixed Income Pool	8%	Three-month U.S. Treasury Bill
Intermediate-Term Fixed Income Pool	70%	Barclays 1-3 Year Gov't Bond Index
Broad Fixed Income	9%	Barclays U.S. Aggregate
Domestic Equity Pool	8%	Russell 3000
International Equity Pool	5%	MSCI ACWI ex-U.S.
Real Estate Investment Trusts	0%	Allocation up to 4%
Invested Assets as of Sept. 30, 2018	\$1,424.2	million
Long-Term Expected Rate of Return	3.38%	Callan's returns
Probability of Negative Return Over One Year	9.96%	

Note: GeFONSI is an acronym for general fund and other non-segregated investments.

Statutory Budget Reserve Fund

Asset allocation and summary

Invested Assets as of Sept. 30, 2018¹

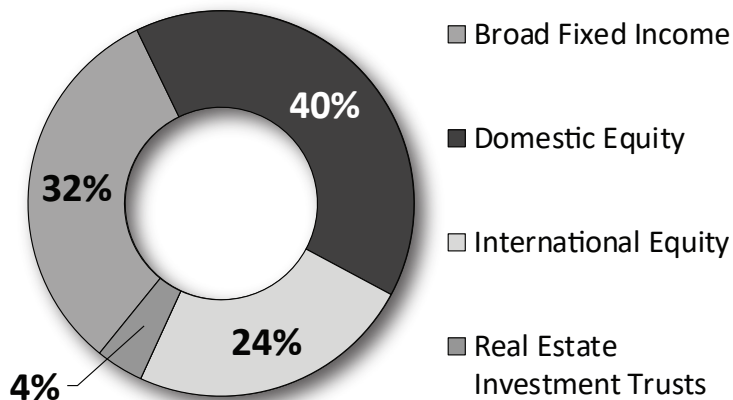
\$0.0

million

¹ The SBRF balance at Sept. 30, 2018, reflects draws for general fund cash needs.

Public School Trust Fund

High risk: long-term investment horizon



Broad Market: Barclays U.S. Aggregate. Domestic Equity: Russell 3000 Index. International Equity: MSCI ACWI ex-U.S. High Yield: U.S. High Yield BA x-144As 2% Cap. Real Estate Investment Trusts: FTSE NAREIT All Equity Index.

These funds are managed by the department's Treasury Division.¹

In the 2018 legislative session, the Alaska Legislature adopted a protocol to appropriate a portion of the value of the Alaska Permanent Fund to the general fund beginning in FY 2019. The estimated amount of this appropriation is shown as unrestricted revenue beginning in FY 2019. Additional information about the protocol and the enabling legislation, Senate Bill 26 (SB 26), can be found in the narrative box later in this chapter.

"Restricted investment revenue" consists of earnings from governmental funds, the Constitutional Budget Reserve Fund (CBRF), other Treasury Division-managed governmental funds, and net earnings of the Alaska Permanent Fund after sub-

tracting the unrestricted portion appropriated to the general fund.

Alaska Permanent Fund

The application of Callan's five- to 10-year capital-market returns projection to the Alaska Permanent Fund Corporation's current asset allocation targets a 6.55% median expected total return. These estimates result in forecasted earnings of \$3.6 billion for FY 2019 and \$4.1 billion for FY 2020.

Market fluctuations could result in the actual return being materially higher or lower than forecast. For example, in the Alaska Permanent Fund Corporation's monthly report, History & Projections (Sept. 30, 2018), it presented a low case and high case showing that FY 2019 net income could range anywhere from -\$3.5 billion to \$8.7 billion, depending on market performance.

As referenced above, in the 2018 legislative session, the Legislature adopted a protocol to appropriate a

¹ The Department of Revenue's Treasury Division invests general fund cash balances alongside cash balances from certain other funds in GeFONSI, a single investment pool. Earnings from GeFONSI are primarily unrestricted revenue, but also include some restricted revenue from balances in general fund subfunds and special revenue funds.

Chapter 7
7

Public School Trust Fund

Asset allocation and summary

Treasury Pool	Target Percent Allocation	Performance Benchmark
Broad Fixed Income	32%	Barclays U.S. Aggregate
Domestic Equity Pool	40%	Russell 3000 Index
International Equity Pool	24%	MSCI ACWI ex-U.S.
Short-Term Fixed Income Pool	0%	Allocation up to 5%; Three-Month U.S. Treasury Bill
Real Estate Investment Trusts	4%	FTSE NAREIT All Equity Index
Invested Assets as of Sept. 30, 2018	\$669.1	million
Long-Term Expected Rate of Return	6.20%	Callan's returns
Probability of Negative Return Over One Year	31.26%	

Chapter 7
8

Public School Trust Fund

Revenue, in millions of dollars

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020

Restricted

Restricted – Designated General Fund

Public School Trust Fund Total Investment Earnings	38.3	14.2	40.1
Public School Trust Fund Earnings Distributed ¹	24.9	28.4	26.2

¹Public School Trust Fund Earnings Distributed reflects the Alaska Department of Education and Early Development actuals for FY 2018. Projections show recommended earnings distributions to maintain a sufficient balance in the fund to cover the budgets for FY 2019 and FY 2020.

portion of the value of the Alaska Permanent Fund to the general fund beginning in FY 2019. The estimated unrestricted Permanent Fund revenue is \$2.7 billion for FY 2019 and \$2.9 billion for FY 2020. This forecast does not distinguish between whether the general fund draw is used for dividends or government spending.

One provision not specified in SB 26 was how the annual draw is divided between dividends and government operations. For FY 2019, the budget appropriated roughly 37% (\$1.0 billion of the \$2.7 billion draw) to the dividend program. However, barring further legislative changes, this split is not set and will need to be determined annually by the Legislature.

Prior to FY 2019, all fund earnings were shown as restricted revenue, even though much of the fund was technically available for appropriation. Beginning in FY 2019, the portion of net earnings that are appropriated per the new statutory formula is shown

as unrestricted investment revenue. The remainder of the net earnings of the fund, after accounting for the unrestricted draw, are shown as restricted investment revenue. The total revenue attributable to the Permanent Fund, per Governmental Accounting Standards Board principles, is the sum of these two categories. The total revenue includes both realized and unrealized earnings of the fund.

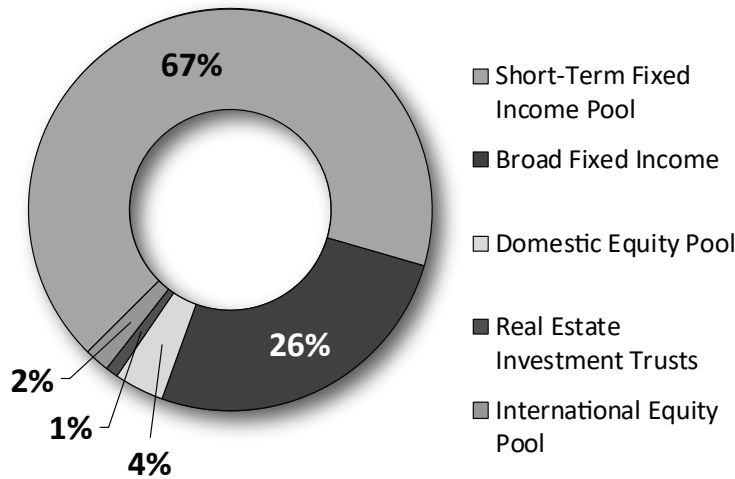
The changes to the presentation of Permanent Fund earnings made in this *Fall 2018 Revenue Sources Book* were based on legislative action during the 2018 legislative session, and were made in consultation with the Office of Management and Budget in the Governor's Office, and the Division of Legislative Finance, a legislative agency.

Constitutional Budget Reserve Fund

The Constitutional Budget Reserve Fund was established in 1990, when Alaskans voted to amend the

Constitutional Budget Reserve Fund

Main account, moderate risk: intermediate horizon



Short-Term: Three-month U.S. T-Bill. Broad Market: Barclays U.S. Aggregate. Domestic Equity: Russell 3000. Real Estate Investment Trusts: FTSE NAREIT All Equity Index. International Equity Pool: MSCI ACWI ex-U.S. High Yield: U.S. High Yield BA x-144As 2% Cap.

Constitutional Budget Reserve Fund

Main account, asset allocation, and summary

Treasury Pool	Target Percent Allocation	Performance Benchmark
Short-Term Fixed Income Pool	67%	Three-month U.S. Treasury Bill
Broad Fixed Income	26%	Barclays U.S. Aggregate
Domestic Equity Pool	4%	Russell 3000
Real Estate Investment Trusts	1%	FTSE NAREIT All Equity Index
International Equity Pool	2%	MSCI ACWI ex-U.S.
Invested Assets as of Sept. 30, 2018	\$1,710.4 ¹	million
Long-Term Expected Rate of Return	2.89%	Callan's returns
Probability of Negative Return Over One Year	3.93%	

¹CBRF-Invested Assets as of Sept. 30, 2018, represents actual cash and securities in the fund as of that date. This figure is less than what was held at the beginning of the fiscal year; \$700 million has been transferred to the general fund for seasonal cash flow purposes, and in anticipation of covering a portion of the projected FY 2019 budget deficit.

The CBRF unassigned fund balance as of June 30, 2018, as reported in the final *FY 2018 Comprehensive Annual Financial Report* (CAFR), is expected to be higher than what is shown on this table. The CAFR unassigned fund balance amount as presented in the FY 2018 CAFR includes the unassigned balance of sweepable subfunds of the general fund, totaling about \$500 million, that were "swept" on June 30 per Article IX, Sec. 17(d) and "reverse swept" back to the subfunds of origin on July 1 per the FY 2019 operating budget. Additionally, all borrowing that occurred from the CBRF during FY 2018 for cash flow purposes will be reconciled to the final audited budget deficit for FY 2018. The actual amount of the CBRF that can be appropriated by the Alaska Legislature is expected to be higher than the current invested assets balance of \$1.7 billion because the deficit for past years was smaller than anticipated.

Constitutional Budget Reserve Fund

Revenue, in millions of dollars

Fiscal Year	Millions of Dollars		
	History	Forecast	
	2018	2019	2020

Restricted

Restricted – Other Restricted

Regular Account	47.2	51.0	74.5
Total	47.2	51.0	74.5

Alaska Constitution to create a separate fund for money received from the resolution of disputes involving oil and gas, and minerals – primarily from the settlement of lawsuits as well as additional tax payments resulting from audits.

Before revenue from royalty, rent and bonus settlements or judgments is deposited in the CBRF, 25% to 50% of that revenue goes into the Permanent Fund, and 0.5% goes to the Public School Trust Fund. Other revenue, generally resulting from settlement of oil and gas production, petroleum property, minerals-related corporate income tax, and mining license tax disputes and audits, goes directly into the CBRF.

The CBRF was set up so that the Legislature may, under certain conditions, appropriate funds from the CBRF to pay for operating state government. The CBRF is also used to provide cash flow sufficiency to the general fund. These funds must eventually be repaid to the CBRF. Lawmakers have tapped into the reserve fund to balance the state budget periodically since the 1990s. The Legislature last repaid its withdrawals in full in FY 2010. However, since then, there have been additional withdrawals.

The unaudited account balance of the CBRF was roughly \$1.7 billion as of Sept. 30, 2018. The official CBRF balance as of the end of FY 2018 will be released in conjunction with Alaska's *FY 2018 Comprehensive Annual Financial Report (CAFR)* published by the Alaska Department of Administration's Finance Division.

In 2014, the Legislature approved a \$3 billion transfer from the CBRF to the Public Employees' Retirement System and Teachers' Retirement System. That transfer, as well as additional authorized withdrawals to balance the state's budget, will need to be paid back to the CBRF under law.

Since FY 2016, the CBRF has been used to cover the gap between state expenditures and the state's collected revenue. However, enactment of a protocol to use a portion of the value of the Permanent Fund for government operations, combined with higher oil prices and budget discipline, has reduced the expected CBRF draws needed over the forecast period.

Alaska Permanent Fund

Revenue, in millions of dollars

	Millions of Dollars		
	History	Forecast	
Fiscal Year	2018	2019	2020
<u>Unrestricted</u>			
Alaska Permanent Fund Draw	–	2,723.0	2,933.1
<u>Restricted</u>			
Restricted – Other Restricted			
Annual Unrealized Gain/Loss	-842.3	-286.2	97.3
Annual Realized Earnings/Loss	6,367.8	3,900.6	3,968.6
Reported Earnings Net of Unrestricted Draw ¹	5,525.5	891.4	1,132.8
Reported Earnings	5,525.5	3,614.4	4,065.9

¹ Starting in FY 2019, Alaska Permanent Fund Restricted revenue is the total realized and unrealized gains, less the unrestricted revenue due to the transfer to the general fund.

Permanent Fund Changes: Senate Bill 26

During the 2018 legislative session, the Alaska Legislature passed Senate Bill 26 (SB 26), which creates a framework for using a portion of the earnings of the Permanent Fund to support government operations. The impetus for this change was several years of low oil prices that led to the near-depletion of the Constitutional Budget Reserve Fund, the state's primary savings account. Accessing the Permanent Fund in this way allowed policymakers to continue providing important government services while also largely avoiding new or increased taxes on Alaska residents and industry.

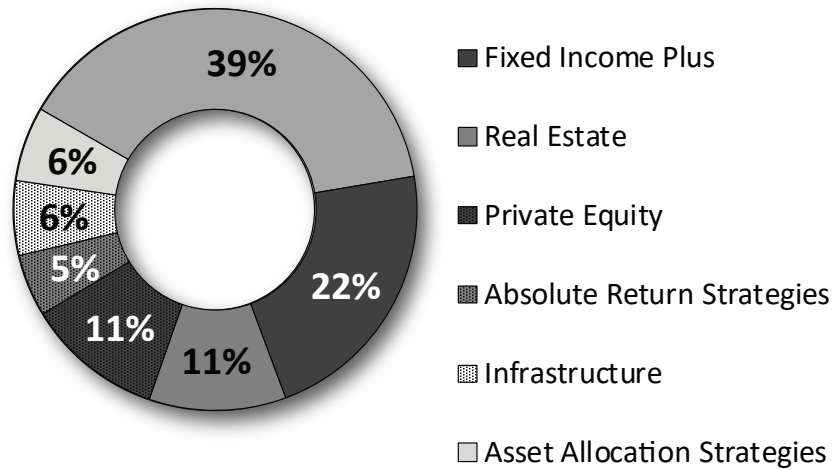
SB 26 provides for an annual appropriation from the Permanent Fund based on the "Percent of Market Value" (POMV) at the end of the fiscal year. To provide predictability and stability of the draw, the POMV is calculated on the average of the first five of the last six fiscal years. For example, the FY

2019 draw is based on the average ending market value in FY 2013 – FY 2017. For FY 2019 and FY 2020, 5.25% of that POMV is appropriated to the general fund; for FY 2021 and beyond the appropriation is 5.0%. Given that royalty deposits to the fund continue, and long-term market returns are expected to exceed the amount of the draw, the annual appropriation should be sustainable over the long term.

One provision not specified in SB 26 was how the annual draw is divided between dividends and government operations. For FY 2019, the budget appropriated roughly 37% (\$1.0 billion of the \$2.7 billion draw) to the dividend program. However, barring further legislative changes, this split is not set and will need to be determined annually by the Legislature.

Alaska Permanent Fund

Target asset allocation



Alaska Permanent Fund

Asset allocation and summary

Treasury Pool	Target Percent Allocation	Performance Benchmark
Stocks	39%	Multiple Strategies
Fixed Income Plus	22%	Multiple Strategies
Real Estate	11%	Multiple Strategies
Private Equity	11%	Multiple Strategies
Absolute Return Strategies	5%	Multiple Strategies
Infrastructure	6%	Multiple Strategies
Asset Allocation Strategies	6%	Multiple Strategies
Invested Assets as of June 30, 2018	\$64,894.4	million
Long-Term Expected Rate of Return	6.55%	Callan's returns

This page was intentionally left blank.



Chapter 8

Credits

An Overview

Alaska's tax code provides for a wide range of credits. Depending on the particular credit, a company may choose to request the State of Alaska to repurchase a credit, apply the credit against the company's own tax liability, or transfer it to another company.

Some credits are built into specific taxes; for example, the Per-Taxable-Barrel Credit is an integral part of the tax calculation for the North Slope oil and gas production tax. That credit, along with other tax credits applied against liability, are sometimes considered a type of "tax expenditure," as the forgone revenue is similar to spending in that it reduces the amount of revenue available for the state budget. Because the state never receives this revenue, these credits are not directly visible in revenue and spending numbers.

On the other hand, tax credits repurchased by the state do show up directly as expenditures in the budget, when funds are appropriated for this purpose.

This chapter provides an overview of the various tax credits, how they are earned, their limitations, and their revenue impact. Other types of tax expenditures, such as deductions, exemptions, and exclusions, are not included in this chapter, but can be found in the Department of Revenue's *Alaska Indirect Expenditure Report* on the Tax Division's website.¹

Recent Developments

The following are recent developments impacting tax credits since the publication of the *Fall 2017 Revenue Sources Book*.

House Bill 331 (HB 331), which creates the Alaska Tax Credit Certificate Bond Corporation (ATCCBC), was passed during the Alaska Legislature's 2018 legislative session. This newly formed corporation is empowered to sell up to \$1 billion in bonds for the purpose of repurchasing outstanding oil and gas tax credit certifi-

¹The *Alaska Indirect Expenditure Report* can be found at <http://tax.alaska.gov/programs/reports.aspx>.

icates. The bill established rules and criteria by which to determine the value of outstanding oil and gas tax credit certificates, and enables the Department of Revenue to make an offer to purchase the certificates at the authorized value. The bonds issued by the ATCCBC will be secured by a subject-to-appropriation pledge of the State of Alaska to make the debt service payments.

HB 331 was passed by the Legislature, enrolled and signed by then-Gov. Bill Walker, however, a legal challenge to the bill has delayed the tax credit bonding program. The pending litigation has paused any planned bond sales by the Department of Revenue as of the writing of this *Revenue Sources Book*.

House Bill 233 (HB 233) was passed by the Legislature during the 2018 legislative session and signed into law by Walker on Sept. 6, 2018. The bill made changes to Education Credit provisions in state law, including extending the credit sunset date to the end of 2024 and changing the rate at which tax credits are earned based on annual contributions. The details of the changes, which take effect Jan. 1, 2019, are outlined later in this chapter.

Oil and Gas Tax Credit Fund

The Oil and Gas Tax Credit Fund, established under AS 43.55.028, was created to allow the State of Alaska to purchase certain transferable oil and gas tax credit certificates. Funds are available subject to annual appropriation by the Legislature for this purpose. Credits available for state purchase include the transferable production tax credits under AS 43.55.023, AS 43.55.025, and certain corporate income tax credits under AS 43.20: the Gas Storage Facility Credit, In-State Refinery Tax Credit, and Liquefied Natural Gas (LNG) Storage Facility Credit. Nontransferable credits, generally those offered under AS 43.55.024, are not available for state purchase.

Legislation passed in 2016 and 2017 enacted provisions that will eventually phase out the Oil and Gas Tax Credit Fund. The legislation eliminates the eligibility for state purchase for any credits earned

Tax Credits Claimed

FY 2016 – FY 2018, in millions of dollars

Millions of Dollars

	Total Credits Claimed		
Fiscal Year	2016	2017	2018 ¹

Credits Applicable to the Oil and Gas Production Tax²

Alternative Credit for Exploration, Cook Inlet Jack-Up Rig Credit, and Frontier Basin Credit	*	<\$1	\$3
Exploration Incentive Credit	\$0	\$0	\$0
Per-Taxable-Barrel Credit	\$86	\$536	\$1,027
Qualified Capital Expenditure Credit, Well Lease Expenditure Credit, and Carried-Forward Annual Loss Credit	\$489	\$33	\$74
Small-Producer / New Area Development Credit	\$34	\$33	\$64

Credits Applicable to the Corporate Income Tax

Gas Exploration and Development Credit	\$0	\$0	D/I
Gas Storage Facility Credit	This was a single-use credit.		
In-State Gas Refinery Credit	*	D/I	D/I
Internal Revenue Code Credits Adopted by Reference	D/I	D/I	D/I
LNG Storage Facility Credit	\$0	\$0	D/I
Oil and Gas Industry Service Expenditures Credit	*	D/I	D/I
Veteran Employment Tax Credit	*	D/I	D/I

Credits Applicable to Multiple Tax Programs

Education Tax Credit	\$6	D/I	D/I
Film Production Credit	\$5	\$5	D/I
Minerals Exploration Incentive Credit	\$0	D/I	D/I

Credits Applicable to Fisheries Taxes

Winn Brindle Scholarship Contributions Credit	<\$1	<\$1	D/I
Salmon and Herring Product Development Credit	\$4	\$3	D/I
Community Development Quota Credit	<\$1	<\$1	D/I
Other Taxes Credit	N/T	N/T	N/T

Total All Reportable Tax Credits	\$661	\$612	\$1,167
---	--------------	--------------	----------------

¹The FY 2018 credit totals are estimated pending annual tax filings.

²The information in this table includes credits either used against tax liability, or purchased by the state during the fiscal year. There were additional oil and gas credits that have been earned by companies and submitted for state purchase, but for which purchase has not been completed due to limited funds. As of the date of publication, these include \$396 million in credits issued in calendar year 2016, \$358 million in credits issued in CY 2017, and \$42 million in “conditional” exploration credits that have been applied for but not yet issued, which will also be considered to have been issued in CY 2017 for purposes of prioritizing state purchases.

* – Cannot be reported due to confidentiality constraints.

D/I – Data incomplete.

N/T – Not tracked.

Note on Methodology Change:

This table has been updated to show credit numbers consistent with the *FY 2013-FY 2017 Alaska Indirect Expenditure Report*. Beginning with the *Fall 2016 Revenue Sources Book*, the Department of Revenue has revised the methodology for determining which fiscal year any individual tax credit is attributed to, therefore, some recent fiscal years have incomplete data for certain credits. To accurately attribute credits to the fiscal year they were “incurred,” credit amounts are based on returns for filing periods beginning during the relevant fiscal year. For example, a calendar-year return with a filing period that began in January 2018 would be included in FY 2018 data, however, the return may not be filed until FY 2019 or FY 2020.

History of Production Tax Credits

FY 2009 – FY 2018

Millions of Dollars

Fiscal Year	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹
Statewide Credits										
Credits Used against Tax Liability	334	412	361	363	550	919	579	96	462	1,093
Credits Purchased by the State ²	193	250	450	353	369	592	628	498	30	75
Total Statewide Production Tax Credits										
	527	662	811	716	919	1,511	1,207	594	492	1,168

¹ FY 2018 credit totals are estimated pending annual tax filings.

² Credits Purchased by the State consists primarily of production tax credits purchased, but also includes corporate income tax credits available for state purchase from the Oil and Gas Tax Credit Fund. These include the Gas Storage Facility Credit, LNG Storage Facility Credit, and Refinery Credits.

on or after July 1, 2017, except for the LNG storage facility, and refinery tax credits, both of which sunset in 2020. State purchase is limited in several ways. Only companies that produced fewer than 50,000 British thermal units (Btu) equivalent barrels per day in the prior calendar year may request state purchase, and companies may only request purchases up to \$70 million of credits per company per year. The first \$35 million of this request may be purchased at full value and the second \$35 million at 75% of their value.

If insufficient funds are appropriated to fulfill all credit purchase requests, as has been the case the past several years, the Tax Division's regulations establish the following protocol to allocate allotted funds.

First, all credits for which repurchase was requested prior to Jan. 1, 2017, are funded on a pro-rata basis. For example, in fiscal year 2018, \$77 million was appropriated for credit repurchase and that amount was used to purchase 16% of all the outstanding pre-2017 credits.

Once all pre-2017 credits have been used or purchased, credits earned on or after Jan. 1, 2017, will be funded, first by the year that the repurchase was requested. All 2017 credits will be paid before any 2018 credits are paid. Within the credits for which repurchase was requested in a single year, the applicants are ranked based on the companies' Alaska resident-hire percentage, including contractors.

The Department of Revenue's estimates of credit purchases reflects credits earned for activity completed prior to July 1, 2018. Consistent with past practice, it is assumed that all outstanding credits will be funded in FY 2020 through either appropriation or bonding.

However, the state may appropriate a lower amount, and in recent years it has. Under a statutory formula in AS 43.55.028(c), the Oil and Gas Tax Credit Fund receives a share of taxes levied under AS 43.55.011, the production tax statute. That share is 10% of revenue from taxes levied when the Alaska North Slope (ANS) price for the fiscal year is forecasted at \$60 per barrel or higher, and 15% of revenue from taxes levied when the ANS price for the fiscal year is forecasted at below \$60 per barrel. The statutory appropriation based on the fall 2018 forecast is shown in Figure 8-3. In recent practice, annual appropriations have been based on the *Spring Revenue Forecast*, which is the last official forecast before the passage of the state's budget.

HB 331 – discussed in the recent developments section earlier in this chapter – provided for bond sales to address the outstanding tax credits, and as of publication of this forecast is subject to a legal challenge that has delayed the program. In the FY 2019 budget, the Legislature appropriated a total of \$100 million in funding for the state purchase of tax credits, to be made available in the event that planned bond sales are delayed or otherwise not allowed to proceed in FY 2019. This would leave an estimated balance of \$690 million of outstanding tax credits available for state purchase at the end of FY 2019.

For purposes of analysis in this *Revenue Sources Book*, the assumption is made that \$100 million of credits are repurchased by the state in FY 2019, and that all remaining eligible credits are repurchased in FY 2020 either through bonding or direct appropriation.

Companies may use certain transferred tax credits to offset a prior-year tax liability, contingent on that prior-year liability not being dedicated to the Con-

10-Year Forecast for Production Tax Credits

Fall 2018 forecast for FY 2019 – FY 2028

Millions of Dollars

Fiscal Year	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Statewide Credits										
Credits Used Against Tax Liability	1,360	1,231	1,144	1,103	1,083	1,036	1,073	1,121	1,169	1,195
Credits Purchased by the State ¹	103	732	15	0	0	0	0	0	0	0
Total Statewide Production Tax Credits										
	1,463	1,963	1,159	1,103	1,083	1,036	1,073	1,121	1,169	1,195
Statutory Appropriation to Oil and Gas Tax Credit Fund²										
	–	170	166	157	154	149	150	162	177	193

¹ Credits Purchased by the State consists primarily of production tax credits purchased, but also includes corporate income tax credits available for state purchase from the Oil and Gas Tax Credit Fund. These include the Gas Storage Facility Credit, LNG Storage Facility Credit, and Refinery Credits.

² Per AS 43.55.028(c), the statutory appropriation is 10% of taxes levied by AS 43.55.011 (oil and gas production tax) when the Alaska North Slope price forecast for the fiscal year is \$60 per barrel or higher, and 15% of taxes levied by AS 43.55.011 when the ANS price forecast for the fiscal year is below \$60 per barrel.

stitutional Budget Reserve Fund (CBRF). Based on analysis of possible qualifying liabilities, the fall 2018 forecast assumes approximately \$50 million worth of credits being transferred, or sold, to companies with a prior-year tax liability in FY 2019. These credits would then be used by producers, in lieu of making additional tax payments for certain prior-year tax liabilities that would otherwise go to the general fund. The net result: both the forecasted production tax revenue and the total balance of credits outstanding are reduced by \$50 million.

Credits Applicable to the Oil and Gas Production Tax

Alternative Credit for Exploration

AS 43.55.025(a)(1)-(4)

The Alternative Credit for Exploration is a transferable and state repurchase-eligible credit for expenditures for certain oil and gas exploration activities.

Outside Cook Inlet, the credit is 40% for seismic costs outside an existing unit, 30% for drilling costs for wells greater than 25 miles from an existing unit, 30% for preapproved new targets greater than 3 miles from an existing well, and 40% for preapproved new targets greater than 3 miles from a well and greater than 25 miles from an existing unit. The 3-mile limit

does not apply for wells in “Frontier Basins” as described under the Frontier Basin Credit below.

Within Cook Inlet, the credit was 40% for seismic costs outside an existing unit, 30% for drilling costs greater than 10 miles from an existing unit, 30% for preapproved new targets, and 40% for preapproved drilling costs for wells that are greater than 10 miles from an existing unit. The credit expired on July 1, 2016, for the North Slope and Cook Inlet. For areas other than the North Slope and Cook Inlet (for instance, Middle Earth), the credit expires Jan. 1, 2018, for seismic work and Jan. 1, 2022, for exploration drilling.

As of fall 2018, credits were still outstanding based on North Slope and Cook Inlet activity that occurred prior to the credit expiration. As a result, the forecast anticipates credits applied against liability or available for state repurchase in FY 2019 and FY 2020.

Carried-Forward Annual Loss Credit

AS 43.55.023(b)

This credit is a transferable and state repurchase-eligible credit for a carried-forward annual loss, defined as a producer or explorer’s adjusted lease expenditures that are not deductible in calculating production tax value for the calendar year.

On the North Slope, during 2014 and 2015, the credit for carried-forward annual losses incurred was 45% of

Chapter 8
4

Historical Production Tax Credits and Forecast

Detail, FY 2009 – FY 2028

Millions of Dollars

Fiscal Year	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹
Credits Purchased by the State of Alaska										
North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b)	173	223	399	267	*	*	203	*	*	*
Credits under AS 43.55.025 ²	14	23	12	53	*	*	21	*	*	*
Total North Slope	187	246	411	320	261	281	224	212	<1	51
Non-North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	*	*	*	29	*	*	384	*	30	23
Credits under AS 43.55.025 ²	*	*	*	4	*	*	21	*	0	*
Credits under AS 43.20 ³	*	*	*	0	*	15	0	*	0	*
Total Non-North Slope	7	4	39	33	108	312	404	287	30	24
Total Credits Purchased by the State	193	250	450	353	369	592	628	498	30	75
Credits Used Against Tax Liability^{4,5}										
North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b)	279	339	313	306	486	332	0	*	*	*
Transitional Investment Credit: AS 43.55.023(i)	0	0	0	*	*					
Per-Taxable-Barrel Credit, AS 43.55.024(i)-(j) ⁶						516	524	86	536	1,027
Small-Producer Credit, AS 43.55.024(a) and (c)	*	*	*	*	*	*	*	*	*	*
Credits under AS 43.55.025 ²	*	*	*	*	*	*	*	*	*	*
Total North Slope	328	402	345	347	536	907	575	120	570	1,087
Non-North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	0	*	11	*	*	*	*	*	*	*
Small-Producer Credit, AS 43.55.024(a) and (c)	6	*	6	*	*	*	*	*	*	*
Total Non-North Slope	6	10	17	16	14	12	10	5	1	6
Total Credits Used Against Tax Liability	334	412	361	363	550	919	585	125	571	1,093
Total Credits North Slope	*	647	756	667	797	1,188	792	302	570	1,138
Total Credits Non-North Slope	*	14	56	49	122	323	418	296	31	30
Total Statewide Production Tax Credits	\$526	\$662	\$811	\$716	\$918	\$1,511	\$1,213	\$623	\$602	\$1,168
Carried-Forward Credits Balance for										
Companies Not Eligible for State Purchase⁷	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62
Tax Value of Carried-Forward Annual Losses⁸										

* Data cannot be reported due to confidentiality constraints.

¹ These numbers are preliminary pending annual returns.

² Credits under AS 43.55.025 include the Alternative Credit for Exploration, Frontier Basin Credit, and Cook Inlet Jack-up Rig Credit.

³ Credits under AS 43.20 include the Gas Exploration and Development Credit, Gas Storage Facility Credit, In-State Gas Refinery Credit, and the

LNG Storage Facility Credit.

⁴ The Education Credit, AS 43.55.019, though not reported in its own credit category in the summary, was less than \$1 million in each year reported and is calculated in the total.

⁵ For historical credits against tax liability, geographic location was determined by attributing all .023(l) credits to Non-North Slope, all .025 credits

Millions of Dollars

Forecast

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Credits Purchased by the State										
North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b)	65	314	0	0	0	0	0	0	0	0
Credits under AS 43.55.025 ²	3	94	0	0	0	0	0	0	0	0
Total North Slope	68	408	0	0	0	0	0	0	0	0
Non-North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	33	223	0	0	0	0	0	0	0	0
Credits under AS 43.55.025 ²	1	56	0	0	0	0	0	0	0	0
Credits under AS 43.20 ³	1	45	15	0	0	0	0	0	0	0
Total Non-North Slope	35	324	15	0	0	0	0	0	0	0
Total Credits Purchased by the State	103	732	15	0	0	0	0	0	0	0
Credits Used Against Tax Liability^{4,5}										
North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b)	35	19	0	0	0	0	0	0	0	0
Transitional Investment Credit: AS 43.55.023(i)										
Per-Taxable-Barrel Credit, AS 43.55.024(i)-(j) ⁶	1,245	1,190	1,126	1,093	1,078	1,032	1,068	1,121	1,169	1,195
Small-Producer Credit, AS 43.55.024(a)(c)	14	14	14	8	2	2	3	0	0	0
Credits under AS 43.55.025 ²	50	0	0	0	0	0	0	0	0	0
Total North Slope	1,344	1,223	1,140	1,100	1,080	1,034	1,071	1,121	1,169	1,195
Non-North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	11	3	0	0	0	0	0	0	0	0
Small-Producer Credit, AS 43.55.024(a)(c)	5	5	4	3	3	3	3	0	0	0
Total Non-North Slope	16	7	4	3	3	3	3	0	0	0
Total Credits Used Against Tax Liability	1,360	1,231	1,144	1,103	1,083	1,036	1,073	1,121	1,169	1,195
Total Credits North Slope	1,412	1,631	1,140	1,100	1,080	1,034	1,071	1,121	1,169	1,195
Total Credits Non-North Slope	51	331	19	3	3	3	3	0	0	0
Total Statewide Production Tax Credits	\$1,463	\$1,963	\$1,159	\$1,103	\$1,083	\$1,036	\$1,073	\$1,121	\$1,169	\$1,195
Carried-Forward Credits Balance for										
Companies Not Eligible for State Purchase⁷	\$31	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12
Tax Value of Carried-Forward Annual Losses⁸	\$176	\$399	\$797	\$1,223	\$1,508	\$1,738	\$1,828	\$1,857	\$1,861	\$1,828

to North Slope, and the other credits were placed according to where the company primarily operated. Since multiple companies had operations in multiple areas, these numbers should be treated as rough estimates.

⁶ For FY 2014, the Per-Taxable-Barrel Credit was in effect for only the last six months of the fiscal year. Credits applied against liability in the forecast are limited by a company's tax liability including the minimum tax.

⁷ This row includes estimates of carried-forward credits for previous calendar years for companies with over 50,000 BOE of production. Carried-forward credits are primarily for net operating losses under AS 43.55.023(b).

⁸ Tax value is calculated by multiplying the amount of carried-forward annual loss by the statutory 35% tax rate.

the loss. On Jan. 1, 2016, the credit for losses incurred on the North Slope decreased to 35%. Beginning Jan. 1, 2017, a gross value reduction (GVR) could no longer be used to increase the size of an annual loss for credit calculation purposes. This credit expired for the North Slope on Jan. 1, 2018 and was replaced by a new carried-forward lease expenditures provision.

For areas outside the North Slope, the credit was repealed on Jan. 1, 2018 as well. For Middle Earth, the credit was replaced by a carried-forward lease expenditures provision. For Cook Inlet, however, the credit was repealed.

Education, and Film Production credits

See “Credits Applicable to Multiple Tax Programs.”

Frontier Basin Credit

AS 43.55.025(a)(6)-(7)

The Frontier Basin Credit is a transferable, state repurchase-eligible credit for the first four exploration wells and the first four seismic exploration projects within six specific areas designated in AS 43.55.025(o), also called the “Frontier Basins.” The credit is for the lesser of 80% of qualified exploration drilling expenses or \$25 million. For seismic projects, the credit is for the lesser of 75% of qualified seismic exploration expenditures or \$7.5 million. The seismic project credit expired July 1, 2016. The 80% well credit applies to wells drilled or spudded prior to July 1, 2017.

Per-Taxable-Barrel Credit

AS 43.55.024(i)-(j)

The Per-Taxable-Barrel Credit is a production tax credit for each taxable barrel of oil production on the North Slope. This credit is an integral part of the production tax calculation. It cannot be transferred or carried forward, and is not eligible for cash repurchase.

In “new oil” areas that qualify for a GVR, the credit is \$5 per taxable barrel. Those areas are defined in AS 43.55.160(f) and (g).

For areas that do not qualify for a GVR, the credit ranges from \$0 to \$8 per taxable barrel based on the average gross value at point of production (GVPP) per barrel produced in the tax year. The credit operates on a sliding scale ranging from \$0 per barrel when the GVPP is more than \$150 per barrel, to \$8 per barrel when the GVPP is less than \$80 per barrel.

The vast majority of oil produced on the North Slope is not GVR-eligible. Therefore, the structure of the Per-Taxable-Barrel Credit is such that as the price of oil increases, the dollar value of the credit decreases, and vice versa.

One important limit is that if a company chooses to utilize the \$0 to \$8 credit for non-GVR-eligible oil, that company may not use any other credits or deductions to reduce its tax liability for that production to less than the minimum tax established under AS 43.55.011(f), currently 4% of the GVPP. The credit for GVR-eligible oil may not reduce the producer's liability for that production below zero.

Because they cannot be transferred or carried forward, these credits do not create a future liability for the state if they are not used in the year earned.

Qualified Capital Expenditure and Well Lease Expenditure Credit

AS 43.55.023(a) and (l)

These are transferable and state repurchase-eligible tax credits for qualified oil and gas capital expenditures in the state outside the North Slope. They can be taken in lieu of Exploration Credits under AS 43.55.025, but are in addition to any net-operating loss credits under AS 43.55.023(b). Until Jan. 1, 2017, companies could qualify for a credit of 20% of eligible capital expenditures, or 40% of qualified well lease expenditures. As of Jan. 1, 2017, the Qualified Capital Expenditure Credit was reduced from 20% to 10% and the Well Lease Expenditure Credit was reduced from 40% to 20%. On Jan. 1, 2018, both credits were repealed for Cook Inlet, but they remain at the reduced rates for Middle Earth.

Small-Producer/ New Area Development Credit

AS 43.55.024(a) and (c)

The Small-Producer Credit is a nontransferable credit for oil and gas produced by small producers, defined as having average taxable oil and gas production of less than 100,000 Btu-equivalent barrels per day. The credit was available until May 1, 2016, or nine years after the first commercial production of oil and gas on the properties for which the credit applies, whichever is later. Therefore, the credit will gradually sunset over the next several years. The Small-Producer Credit is capped at \$12 million annually for producers with less than 50,000 Btu-equivalent barrels per day. For larger producers, the credit phases out, and is zero for producers with 100,000 or more Btu-equivalent barrels per day. The credit may only be used against tax liability, and only if the producer has a positive tax liability before the application of credits. It may not be carried forward.

The New Area Development Credit was a credit of up to \$6 million per company annually, for oil or gas produced from Middle Earth (leases outside Cook Inlet and the North Slope), providing the producer has

a positive tax liability on that production before the application of credits. The credit was available until May 1, 2016, or nine years after the first commercial production of oil and gas on the properties for which the credit applies, whichever is later. Because there has not been commercial production outside the North Slope and Cook Inlet, no companies qualified for this credit, and it was never used.

Transitional Investment Expenditure Credit

AS 43.55.023(i)

The Transitional Investment Expenditure Credit was a nontransferable credit for qualified oil and gas capital expenditures incurred between March 31, 2001, and April 1, 2006. The credit was 20% of qualified oil and gas capital expenditures incurred between March 31, 2001, and April 1, 2006, not to exceed 10% of the capital expenditures incurred between March 31, 2006, and Jan. 1, 2008. The credit was only available until Dec. 31, 2013.

Credits Applicable to Corporate Income Tax

Education, and Film Production credits

See “Credits Applicable to Multiple Tax Programs.”

Gas Exploration and Development Credit

AS 43.20.043

The Gas Exploration and Development Credit is a nontransferable credit for qualified expenditures for the exploration and development of non-North Slope natural gas reserves. The credit was 25% of qualified expenditures for investment after Jan. 1, 2010; investments in existing units qualified. The credit was capped at 75% of corporate tax liability as calculated before applying other credits. (This credit was passed with a delayed repeal (amended in sec. 16, ch. 16, SLA 2010) and was repealed Jan. 1, 2016.)

Gas Storage Facility Credit

AS 43.20.046

The Gas Storage Facility Credit was a state repurchase-eligible credit, paid out of the Oil and Gas Tax Credit Fund under AS 43.55.028, for the costs incurred to establish an underground natural gas storage facility in Kenai. This credit was limited to one company and was taken in FY 2014.

The credit was \$1.50 per 1,000 cubic feet of “working gas” storage capacity as determined by the Alaska Oil

and Gas Conservation Commission. It did not apply to gas storage related to a gas sales pipeline on the North Slope. To qualify, the facility had to operate as a public utility regulated by the Regulatory Commission of Alaska with open access for third parties. It was effective for facilities placed into service between Jan. 1, 2011, and Dec. 31, 2015. The maximum credit was the lesser of \$15 million or 25% of costs incurred to establish the facility.

In-State Refinery Tax Credit

AS 43.20.053

The In-State Refinery Tax Credit began on Jan. 1, 2015, and is a credit for qualified infrastructure expenditures for in-state oil refineries incurred after Dec. 31, 2014, and before Jan. 1, 2020. The credit may not exceed 40% of total qualifying expenditures or \$10 million per tax year per refinery, whichever amount is less. The credit can be applied against corporate income tax liability and carried forward for up to five years, or purchased by the state. The authorizing statute will sunset on Dec. 31, 2019. This credit cannot be purchased by the state if a company has an outstanding liability to the state.

Internal Revenue Code Credits Adopted by Reference

AS 43.20.021

Under Alaska’s blanket adoption of the federal Internal Revenue Code, taxpayers can claim all federal incentive credits. Federal credits that refund other federal taxes are not allowed. Multistate taxpayers apportion their total federal incentive credits. In most cases, the credit is limited to 18% of the amount of the credit determined for federal income tax purposes that is attributable to Alaska.

LNG Storage Facility Credit

AS 43.20.047

The LNG Storage Facility Credit is a nontransferable, state repurchase-eligible credit for the costs incurred to establish a storage facility for liquefied natural gas. The credit is the lesser of \$15 million or 50% of costs incurred to establish the facility and may be purchased by the state by direct appropriation. It applies to facilities with a minimum storage capacity of 25,000 gallons of LNG that are public utilities regulated by the Regulatory Commission of Alaska. It is for facilities placed into service after Jan. 1, 2011. This credit is limited to one facility, and that facility must commence commercial operation prior to Jan. 1, 2020. This credit cannot be purchased by the state if a company has an outstanding liability to the state.

Minerals Exploration Incentive Credit

See “Credits Applicable to Multiple Tax Programs.”

Oil and Gas Industry Service Expenditures Credit

AS 43.20.049

The Oil and Gas Industry Service Expenditures Credit is a credit of 10% of qualified oil and gas industry service expenditures that are for in-state manufacture or in-state modification of oil and gas tangible personal property with a service life of three years or more. The credit may be applied to corporate income tax liabilities in amounts up to \$10 million per taxpayer per year, and is effective for expenditures incurred after Jan. 1, 2014. The credit is not transferable, but any amount of the credit that exceeds the taxpayer’s liability may be carried forward up to five years.

Urea/Ammonia/Gas to Liquid Facility Credit

AS 43.20.052

The Urea/Ammonia/Gas to Liquid Facility Credit was enacted in 2016. This credit allows an in-state company that produces urea, ammonia, or gas-to-liquids products to apply a credit to its income tax based on natural gas purchased from state leases. The credit is equal to the amount of state royalty paid on natural gas purchased for the qualifying project. The credit cannot be carried forward to future years, is not transferable or eligible for state purchase, and cannot be used to reduce a tax liability below zero. The credit is scheduled to be repealed Jan. 1, 2024.

Veteran Employment Tax Credit

AS 43.20.048

The Veteran Employment Credit is a nontransferable and state repurchase-ineligible credit for corporate income taxpayers who employ qualified veterans in the state. A “qualified veteran” is a veteran who was unemployed for more than four weeks preceding the veteran’s employment date and who was discharged or released from military service (1) not more than 10 years before his or her employment date for a disabled veteran, or (2) not more than two years before his or her employment date for a veteran who is not disabled. The credit is \$3,000 for a disabled veteran or \$2,000 for a veteran who is not disabled, for employment for a minimum of 1,560 hours during 12 consecutive months following the veteran’s employment date. For seasonal employment, the credit is \$1,000 for a veteran employed for a minimum of 500 hours during three consecutive months following the employment date.

Credits Applicable to Fisheries Taxes

Community Development Quota Credit

AS 43.77.040

The Community Development Quota Credit is a nontransferable credit for contributions to an Alaska nonprofit corporation that is dedicated to fisheries industry-related expenditures. The credit is available only for fishery resources harvested under a Community Development Quota. The credit is 100% of their contribution amount up to a maximum of 45.45% of the tax liability on fishery resources harvested under a Community Development Quota. The authorizing statute is scheduled to sunset Jan. 1, 2021.

Education, and Film Production credits

See “Credits Applicable to Multiple Tax Programs.”

Other Taxes Credit

AS 43.77.030

The Other Taxes Credit is a nontransferable and state repurchase-ineligible credit for taxes paid to another jurisdiction on fishery resources landed in Alaska. The credit is 100% of taxes paid with a maximum of 100% of the Alaska tax liability on the fishery resources.

Salmon and Herring Product Development Credit

AS 43.75.035

The Salmon and Herring Product Development Credit is a nontransferable and state repurchase-ineligible credit for eligible capital expenditures to expand value-added processing of Alaska salmon and herring, including ice-making machines. The credit is 50% of qualified investments up to 50% of tax liability incurred for processing salmon and herring during the tax year. It may be carried forward for three years, but the authorizing statute is scheduled to sunset on Dec. 31, 2020. Herring products were added to the credit in 2014.

Winn Brindle Scholarship Contributions Credit

AS 43.75.032, 43.77.035

The Winn Brindle Scholarship Contributions Credit was applicable to both the fisheries business tax, and the fishery resource landing tax. It was a non-transferable credit for contributions to the A.W. “Winn” Brindle Memorial Education Loan Account.

The credit was 100% of the contribution amount, up to a maximum of 5% of tax liability. The credit sunset on Jan. 1, 2017.

Credits Applicable to Multiple Tax Programs

Education Credit

AS 21.96.070, 43.20.014, 43.55.019, 43.56.018, 43.65.018, 43.75.018, 43.77.045

The Education Credit is a nontransferable and state repurchase-ineligible credit applicable to the corporate income tax, fisheries business tax, fishery resource landing tax, insurance premiums tax, title insurance premiums tax, mining license tax, oil and gas production tax, and the oil and gas property tax.

Taxpayers can claim a credit for contributions to vocational educational programs, accredited non-profit, public or private Alaska universities or colleges, Alaska public or private nonprofit elementary or secondary schools, annual intercollegiate sports tournaments, Alaska Native educational programs, facilities that qualify under the Coastal American Partnership, qualified apprenticeship programs, nonprofit regional training centers, the Alaska Higher Education Investment Fund, a postsecondary institution in the state providing dual-credit courses, a residential school in the state, and the Alaska Department of Education and Early Development.

In 2018, the credit is available for up to 50% of annual contributions up to \$100,000, 100% of the next \$200,000, and 50% of annual contributions beyond \$300,000. The credit for any one taxpayer cannot exceed \$5 million annually across all eligible tax types. Beginning on Jan. 1, 2019, the credit is available for up to 50% of annual contributions up to \$100,000, 75% of the next \$200,000, and 50% of annual contributions beyond \$300,000. The credit for any one taxpayer cannot exceed \$1 million annually across all eligible tax types. Previously, only cash contributions were accepted for the Education Tax Credit, but the credit has been expanded to accept contributions of equipment beginning in 2019. Beginning in 2021, the credit is reduced to 50% of all donations; the \$1 million cap on the credit per taxpayer each year remains the same. The Education Tax Credit is currently scheduled to sunset on Dec. 31, 2024.

Film Production Credit

AS 43.98.030, under AS 21.09.210, 21.66.110, 43.20, 43.55, 43.56, 43.65, 43.75, and 43.77

The Film Production Credit is a transferable, but state repurchase-ineligible credit for expenditures on eligible film production activities in Alaska. Effective July 1, 2013, a producer must spend at least \$75,000 in qualified expenditures over a consecutive 24-month period to qualify. The credit is 30% of eligible film production expenditures, plus an additional 20% credit for wages paid to Alaska residents, plus an additional 6% credit for filming in a rural area, plus an additional 2% credit for filming between Oct. 1 and March 30. The credits must be used within six years. In addition to corporate income tax, the tax credit may also be used to offset the insurance premium tax, title insurance tax, oil and gas production tax, oil and gas property tax, mining license tax, fisheries business license tax, or fisheries resource landing tax. The program is capped at a \$300 million maximum budget for all projects.

The film credit program stopped accepting new projects on July 1, 2015, but prequalified film projects are still eligible to receive a credit, once the required documents have been verified, until Jan. 1, 2019.

Minerals Exploration Incentive Credit

AS 27.30.030, 43.20.044

The Minerals Exploration Incentive Credit is applicable to the corporate income tax, mining license tax, and mineral production royalty. It is a nontransferable and state repurchase-ineligible credit for eligible costs of mineral or coal exploration activities, and requires the approval of the Alaska Department of Natural Resources commissioner.

The credit is 100% of allowable exploration costs with a maximum of \$20 million per mining operation and must be used within 15 years. For the mining license tax (MLT), the credit is limited to the lesser of 50% of the MLT liability at the mining operation where the exploration occurred or 50% of total MLT liability. For the corporate income tax, it is limited to the lesser of 50% of the MLT liability at the mining operation where the exploration occurred or 50% of the total corporate income tax liability. For the mineral royalty, the credit is limited to 50% of the royalty liability from the mining operation where the exploration activity occurred.



Chapter 9

State Endowment Funds

Overview

This chapter compares important attributes of five of the state's major endowment funds: the Alaska Permanent Fund, Alaska Mental Health Trust Fund, Public School Trust Fund, Power Cost Equalization Fund, and University of Alaska Endowment.

The University of Alaska Endowment is included in this comparison because it is one of Alaska's public endowment funds that uses the annual distribution calculation method typical of the vast majority of endowments in the United States and Canada.

The fiduciary for each of these endowment funds has the responsibility for establishing an asset-allocation policy for each fund. Table 9-1 compares the current asset-allocation policies for these endowments.

Under the standards adopted by the Governmental Accounting Standards Board, public funds calculate and report their income by recognizing changes in the value of securities as income, or losses, as they occur at the end of each trading day. They do this regardless of whether the securities are actually sold and the income, or losses, are taken or realized. All five of these endowments report annual income on this basis.

However, the Alaska Permanent Fund, Mental Health Trust Fund, and Public School Trust Fund use other measures of annual income for determining their distributions. The Alaska Permanent Fund and the Mental Health Trust Fund are both administered by the Alaska Permanent Fund Corporation (APFC).

In determining the amount of income available for distribution each year for the two funds managed by the Alaska Permanent Fund Corporation, gains or losses on individual investments are not recognized until the investment is sold. For calculating distributable income for the Public School Trust Fund, only interest earned and dividends received are treated as income. Gains and losses in the value of individual investments are never recognized as income. By law,

those gains and losses remain with the principal of the fund.

Missions, Deposits, and Distributions

Alaska Permanent Fund

Each year, the Alaska Permanent Fund Corporation (APFC) calculates the amount of net income realized by the Permanent Fund and this amount plus any surplus funds already in the Earnings Reserve Account are available for appropriation by the Alaska Legislature. The APFC also annually calculates the "income available for distribution," which is defined by statute as 21% of the net income of the Permanent Fund for the last five fiscal years. Beginning in FY 2019, new legislation provides for a transfer from the Earnings Reserve Account to the general fund for the payment of unrestricted general fund expenditures, including the dividend. The amount of the transfer is based on a percentage of the average market value of the Fund at the end of the first five of the preceding six years. This amount is also subject to annual appropriation by the Legislature.

Following the calculation of net income and any appropriated transfer of funds to the general fund, APFC calculates an amount sufficient to offset the effects of inflation on the principal of the Permanent Fund using a formula set out in statute. Subject to annual appropriation by the Legislature, APFC then transfers this amount from the Earnings Reserve Account to the principal of the Permanent Fund. The principal of the Permanent Fund is made up of all oil and gas royalty contributions and legislative appropriations to the principal or corpus of the Permanent Fund.

Mental Health Trust

Earnings from the Alaska Mental Health Trust Fund, which is managed by the Alaska Permanent Fund

State Endowment Funds

Target asset allocations, in percentages

Strategy-Based		Cash	Real Estate Investment Trusts	Broad Fixed Income	Domestic Equity	International Equity		
Public School Trust Fund		0%	4%	32%	40%	24%		
Power Cost Equalization Endowment Fund		0%	5%	31%	40%	24%		
Risk-Based		Cash	Capital Appreciation	Diversifying Strategies	Inflation- Sensitive	Deflation- Sensitive		
University of Alaska Endowment		0%	54%	20%	9%	17%		
Risk-Based		Asset Allocation Strategies	Public Equities	Fixed Income Plus	Private Equity/Growth Opportunities	Absolute Return	Real Estate	Infrastructure/ Private Credit/ Income
Alaska Permanent Fund		5%	38%	22%	12%	5%	11%	7%
Mental Health Trust		5%	38%	22%	12%	5%	11%	7%
Risk-Based				Cash	Broad Market Fixed Income	Domestic Equity	International Equity	
Other Mental Health Trust Investments				8%	25%	45%	22%	

Corporation, are for use in ensuring an integrated comprehensive mental health program for the state. Current statute requires net income earned on the principal of the fund to be calculated in the same manner as the Alaska Permanent Fund. Only realized income is ultimately made available for distribution to the Mental Health Trust.

The Alaska Mental Health Trust Authority Board of Trustees has established a percent-of-market-value distribution model where distributions from cash investments managed by APFC and the Department of Revenue are limited to 4.25% of the four-year moving-average net asset value. This reduces the volatility of program funding while budget reserves ensure funding continues even when markets are down.

Funding is also made available for mental health programs from spendable income generated by the Mental Health Trust's directly owned commercial real estate portfolio as well as other revenue generated from land that is managed by the Alaska Department of Natural Resources' Trust Land Office.

The balance of funding consists of both interest earned on cash holdings, and the unexpended bal-

ance of expired appropriations lapsing back to the fund.

The Mental Health Trust has a policy to periodically make transfers and/or assign funds to offset the effects of inflation in order to preserve the purchasing power of the fund.

Public School Trust Fund

AS 37.14.160(5) states that on July 1 of each year, the Department of Revenue commissioner shall determine the monthly average market value of the fund for the previous five fiscal years preceding the previous fiscal year. The Legislature may appropriate not more than 5% of the amount determined by the commissioner. The appropriated amount may be expended the following fiscal year for the support of the state public school system.

Power Cost Equalization Endowment Fund

AS 42.45.080(c) states that on July 1 of each year, the Department of Revenue commissioner shall deter-

mine the monthly average market value of the Power Cost Equalization Endowment Fund for the previous three closed fiscal years, and the earnings of the fund for the previous closed fiscal year.

Five percent of the amount determined by the commissioner may be appropriated for the fiscal year beginning the following July 1 for: 1) funding the Power Cost Equalization and Rural Electric Capitalization Fund (AS 42.45.100); 2) reimbursement to the Department of Revenue for the costs of establishing and managing the fund; and 3) reimbursement of other costs of administration of the fund.

If the amount appropriated is insufficient to achieve the purposes of (1) through (3), the amount shall be prorated among the purposes listed in (1) and (2). If the earnings of the fund exceed the appropriation for the current fiscal year, the Legislature may appropriate certain amounts for other purposes further defined in AS 42.45.080(c).

University of Alaska Endowment

The University of Alaska's Land Grant Endowment Trust Fund is invested along with the University of Alaska Foundation's endowments in a consolidated endowment fund. The Consolidated Endowment Fund is a pooled investment fund that is managed

by the University of Alaska Foundation Investment Committee in accordance with an agreement and an investment policy approved by the University Board of Regents and the Foundation Board of Directors.

The overall objectives of the Consolidated Endowment Fund are to provide a stream of relatively stable earnings in support of the annual budgetary needs of the University of Alaska while maintaining the real (inflation-adjusted) purchasing power of the fund to the extent practicable. In order to meet these objectives, the goal of the fund is to achieve an average annual real return of 5% of its market value, net of investment management expenses.

The spending allowance rate for the University of Alaska Land Grant Endowment Trust Fund is 4.5% of the five-year moving average of the market value of its portion of the Consolidated Endowment Fund measured on Dec. 31 of each year. The University of Alaska Foundation's spending allowance rate is based on the maturity and financial health of each endowment in its pool and ranges from 0-4.0% of the five-year moving average of the market value of its portion of the Consolidated Endowment Fund measured on Dec. 31 of each year.

This page was intentionally left blank.



Chapter 10

Public Entities and the University of Alaska

Overview

The State of Alaska has established the following public corporations and entities to carry out certain public policies:

- Alaska Aerospace Corporation (AAC)
- Alaska Energy Authority (AEA)
- Alaska Gasline Development Corporation (AGDC)
- Alaska Housing Finance Corporation (AHFC)
- Alaska Industrial Development and Export Authority (AIDEA)
- Alaska Mental Health Trust Authority (AMHTA)
- Alaska Municipal Bond Bank Authority (AMBBA)
- Alaska Railroad Corporation (ARC)
- Alaska Seafood Marketing Institute (ASMI)
- Alaska Student Loan Corporation (ASLC)
- University of Alaska (UA)

These 11 entities are components of state government presented in the state's *Comprehensive Annual Financial Report*. Information in this section is provided by these entities. The Alaska Housing Finance Corporation, Alaska Industrial Development and Export Authority, Alaska Student Loan Corporation, and Alaska Municipal Bond Bank Authority pay, or may elect to pay, some portion of their income as an annual dividend to the state. This chapter summarizes the missions, financing, and dividends of these corporations and other public entities.

Missions, Financing, and Dividends

Alaska Aerospace Corporation

The Alaska Aerospace Corporation (AAC) operates and maintains the Pacific Spaceport Complex – Alaska (PSCA), a commercial spaceport in Kodiak, Alaska, which provides commercial rocket vehicle launch support services. It promotes space-related business, research, education, and economic growth in the state.

The state has supported AAC in the past through funding for capital and operating expenses. In fiscal

year 2018, the state did not contribute to the maintenance operations of PSCA. AAC does not pay a dividend or return capital to the state.

Alaska Energy Authority

The Alaska Energy Authority (AEA) provides loans to utilities, communities, and individuals to pay for the purchase or upgrade of equipment. Additionally, the agency administers the Power Cost Equalization program, subsidizing rural electric costs with earnings from the Power Cost Equalization Endowment. AEA receives federal and state money to provide technical advice and assistance in energy planning, emergency response management, and energy infrastructure construction and conservation in rural Alaska. AEA owns, operates, and maintains (under contractual agreements) state-owned power projects, such as the Bradley Lake Hydroelectric Project and the Alaska Intertie.

The AEA was established in 1976 to finance and operate power projects. This corporation has also administered rural energy programs at various times, including the present. As a result of legislatively mandated reorganizations, capital has moved into and out of the corporation.

AEA does not pay a dividend or return capital to the state on a regular basis.

Alaska Gasline Development Corporation

The Alaska Gasline Development Corporation (AGDC) has early beginnings dating back to 2009, when declining Cook Inlet gas supplies resulted in energy brown outs and crippling Interior energy costs in communities across Alaska. In 2010, the Alaska Legislature passed House Bill 369 creating AGDC.

Today, AGDC is an independent, public corporation of the state. Its corporate vision is to maximize the benefit of Alaska's vast North Slope natural gas resources through the development of infrastructure necessary to move the gas into local and international markets. In addition, AGDC strives to advance the development, financing, construction, and opera-

Public Entities – FY 2018 Financial Facts

In millions of dollars

	Millions of Dollars				
	Total Assets	Assets Less Liabilities Book Value	FY 2017 Operating Budget	FY 2018 Operating Budget	Total Positions ¹
Alaska Aerospace Corporation	93.9	79.8	11.0	11.0	14
Alaska Energy Authority	1,605.1 ²	1,488.9	46.8	42.0	See AIDEA ³
Alaska Gasline Development Corporation ⁴	58.9	47.5	10.4	10.4	25
Alaska Housing Finance Corporation	4,101.6 ²	1,538.7 ⁵	96.1	98.7	350
Alaska Industrial Development and Export Authority	1,436.4 ²	1,328.6 ⁵	12.9	11.7	90
Alaska Mental Health Trust Authority	701.1	670.5	4.0	4.0	17
Alaska Municipal Bond Bank Authority	1,222.4	54.1	1.0	1.0	2
Alaska Railroad Corporation ⁶	1,070.8	338.7	118.8	118.9	678
Alaska Seafood Marketing Institute	20.2	15.4	21.6	20.6	20
Alaska Student Loan Corporation ⁷	286.8	221.8	12.3	12.1	82
University of Alaska	2,282.9	1,543.3	899.8	879.1	4,250

¹Permanent full time, permanent part time and temporary are included in total positions.

²AIDEA, AEA, and AHFC's asset totals include deferred outflow of resources.

³AIDEA provides staff for the activities of the AEA. A significant portion of AIDEA's staff is engaged in AEA programs.

⁴AGDC's numbers are unaudited and subject to revision.

⁵Assets and deferred outflows of resources less liabilities and deferred inflows of resources.

⁶The Alaska Railroad reports financial data on a calendar-year basis. Assets and book value shown in this table are from audited Dec. 31, 2017, financial statements. The revised operating budgets figure shown here is for calendar year 2017 and CY 2018.

⁷ASLC contracts with the Alaska Commission on Postsecondary Education (ACPE) to service its loan portfolio and provide staff support. Budget and positions reported are those of ACPE's funded by ASLC.

tion of a North Slope natural gas system capable of delivering natural gas for the maximum benefit of Alaskans.

AGDC is pursuing two options for delivery of North Slope natural gas to Alaskans and potential international markets: the Alaska Liquefied Natural Gas (LNG) Project is AGDC's primary project, and the Alaska Stand Alone Pipeline (ASAP) is its secondary and backup project.

Major milestones in AGDC's history:

- May 2013 – The enactment of House Bill 4, where AGDC received the power, authority, and multi-year funding to advance the ASAP project through open season and sanctioning. House Bill 4 also established AGDC as an independent, public corporation of the state. Today, AGDC continues to have a legal existence separate and distinct from the State of Alaska, while main-

taining its structure within the Alaska Department of Commerce, Community, and Economic Development for administrative purposes.

- April 2014 – The passage of Senate Bill 138 expanded AGDC's mission and authority to include primary responsibility for developing an Alaska liquefied natural gas project on the state's behalf. That legislation also directed AGDC to assist the Alaska departments of Revenue, and Natural Resources in maximizing the value of the state's gas. At that time, the Legislature appropriated \$69.8 million to fund the state's equity participation in the Alaska LNG Project.

AGDC is responsible for two funds that it uses to finance its operations and activities for both the ASAP and Alaska LNG projects.

The first fund, the In-State Natural Gas Pipeline Fund, was established in 2013 to pay for the planning and

engineering of the ASAP in-state natural gas pipeline project (AS 31.25.100). The State of Alaska appropriated approximately \$395 million to the fund and AGDC. However, in 2015, the Legislature appropriated \$157 million from the fund to other departments in state government (Sec 9, Ch. 1, SSSLA 15).

The second fund, the Alaska LNG Project Fund, was established in 2014 to fund state expenditures associated with the Alaska LNG Project and the state's equity participation in that venture (AS 31.25.110). When the fund was originally authorized, the state received a 25% ownership interest in the project. The fund has been capitalized with appropriations totaling \$69.8 million. Since then, AGDC has taken over the leadership of the project, and is responsible for all management and oversight.

Signed into law Nov. 6, 2015, Senate Bill 3001 appropriated approximately \$144.1 million from the state's general fund to the Alaska LNG Project Fund to acquire the interest held by TransCanada in the Alaska LNG project, and to continue to fund the state's share of preliminary front-end engineering and design work.

Major Component Accomplishments in 2018:

- Signed a Joint Development Agreement (JDA) with China Petrochemical Corporation (Sinopec), CIC Capital Corporation (CIC Capital), and Bank of China to develop the Alaska LNG project.
- Received Notice of Federal Energy Regulatory Commission's (FERC) Environmental Impact Statement (EIS) Schedule in Federal Register.
- Signed a binding gas sales precedent agreement with BP Alaska.
- Signed four Letters of Intent (LOIs) for LNG purchase. There are now a total of 16 agreements with potential customers.
- Received "covered project" status under Title 41 of the Fixing America's Surface Transportation Act (FAST-41). FAST-41 provides expedited federal project review.
- Received tax-exempt status from the U.S. Internal Revenue Service.
- Received FERC's Notice of Schedule for the Alaska LNG project.
- Received the U.S. Army Corps of Engineers' Final Supplemental Environmental Impact Statement (SEIS) for the ASAP project.

Alaska Housing Finance Corporation

The Alaska Housing Finance Corporation (AHFC) was created in 1971 to assist in the financing, development and sale of dwelling units, operate the state's public housing, offer various home loan programs emphasizing housing for low- and moderate-income and rural residents, and administer federally and

state-funded multi residential housing, energy efficiency and weatherization programs within Alaska.

Between 1976 and 1984, the Legislature appropriated \$739.9 million in cash and \$292.5 million in mortgages held by the general fund to the corporation. Payments on mortgages, including additional mortgages purchased with cash, have helped build the corporation's asset base. In 1993, AHFC received an additional \$27.7 million in cash and \$9.3 million in equity when the Legislature merged the Alaska State Housing Authority with AHFC.

Generally, AHFC accomplishes its mortgage-related objectives by issuing its own bonds and other debt related instruments to finance qualified loans originated by financial institutions in Alaska. Interest and principle receipts from financed loans coupled with investment earnings repays bondholders and contributes toward the corporation's income, enabling the corporation to pay an annual dividend and/or return of capital to the state.

In 2003, the Legislature enacted legislation (House Bill 256) to modify the law that created the AHFC, putting into place a transfer plan between the AHFC and the state. Then-Gov. Frank Murkowski signed the legislation into law the same year, and the Legislature modified it in 2006 with Senate Bill 236. The law calls for annual transfers that do not exceed the lesser of (1) 75% of adjusted change in net position for the fiscal year two years prior to the current fiscal year or (2) \$103 million less debt service on certain state capital project bonds, less any legislative appropriation of AHFC's unrestricted, unencumbered funds other than appropriations of its operating budget. Since 1991, AHFC has paid nearly \$2 billion total in dividends to the state, including \$30.4 million in FY 2018.

Alaska Industrial Development and Export Authority

The Alaska Industrial Development and Export Authority (AIDEA) provides various means of financing and investment to advance economic growth, diversification, and job opportunities in Alaska. AIDEA's financing tools include loan participations, direct loans, credit enhancements, issuing of tax-exempt and taxable conduit revenue bonds, and preferred equity investments in projects. AIDEA's financing is available for enterprises in the commercial, industrial, resource, and nonprofit sectors, as well as public entities in certain instances. The corporation generates income from interest on its loans, investments, and leases, and the operation of its properties.

Between 1981 and 1986, the State of Alaska capitalized the Authority with approximately \$333 million in cash and loans. Since then, the Authority has not required state assistance to fund operations; instead, it has paid annual dividends to the state.

Public Entities – FY 2018 Revenue and Dividends

In millions of dollars

	Millions of Dollars				
	Revenue	Expenditures	Net Income	Dividend	State Contribution
Alaska Aerospace Corporation	23.2	25.6 ¹	-2.4	0.0	0.0 ²
Alaska Energy Authority	104.0	85.8	27.7	0.0	9.5
Alaska Gasline Development Corporation ³	0.8	34.5	-33.7	0.0	0.0
Alaska Housing Finance Corporation	246.3	212.7 ⁴	33.6	30.4	0.1
Alaska Industrial Development and Export Authority	108.9 ⁵	95.5	13.4	12.9	43.9 ⁶
Alaska Mental Health Trust Authority	71.8	23.9	47.9	0.0	0.0
Alaska Municipal Bond Bank Authority	53.4	54.2	-0.8	0.0	0.0
Alaska Railroad Corporation	191.3	168.9	22.4	0.0	0.0
Alaska Seafood Marketing Institute	14.1 ⁷	14.5	-0.4	0.0	1.0
Alaska Student Loan Corporation	12.4	13.3	-1.0	0.0	0.0
University of Alaska	746.9	754.7	-7.8	0.0	325.3 ⁶

¹For AAC, insurance payments and capitalized expenditures for rebuilding the launch complex are included.

²For AAC, on-behalf payments made by the State of Alaska for pensions are included in the State Contribution column.

³AGDC's numbers are unaudited and subject to revision.

⁴For AHFC, the Expenditures amount includes operating expenses, nonoperating expenses, special items, and transfers, as applicable.

⁵Includes State of Alaska nonemployer contribution for pension and Other Postemployment Benefits (OPEB) for the AIDEA contribution.

⁶Does not include on-behalf payments made by the State of Alaska for pensions.

⁷Revenue from the seafood marketing assessment tax of \$9.9 million is included in the Revenue column, not the State Contribution column.

As defined by statute, AIDEA must make available to the state each year 25% to 50% of its audited "net income" for the "base year." The "base year" is the fiscal year ending two years prior to the end of the fiscal year in which the dividend payment is made to the State of Alaska. In no case may the dividend exceed the base year unrestricted audited "net income." The actual transfer of the dividend requires a legislative appropriation that may be a line item vetoed by the governor.

Since 1997, AIDEA has paid more than \$392.8 million in dividends to the state treasury, including \$12.9 million in FY 2018.

Alaska Mental Health Trust Authority

The Alaska Mental Health Trust Authority, a public corporation of the state within the Department of Revenue, carries out the state's obligations under the Mental Health Enabling Act of 1956, namely to ensure an integrated comprehensive mental health program.

The Mental Health Enabling Act established the Alaska Mental Health Trust as a perpetual trust and capitalized it with 1 million acres of land that were to

be managed to generate income for mental health services in Alaska.

During the course of class-action litigation, the Alaska Supreme Court concluded the state breached its fiduciary duty while managing Trust land. A 1994 settlement created the Alaska Mental Health Trust Authority and established a seven-member board of trustees to oversee it. The settlement recapitalized the Mental Health Trust with \$200 million and 1 million acres of land consisting of original Trust land as well as replacement land.

Earnings on this asset base are used to fund a variety of programs and are accounted for separately in the annual Mental Health budget, which is typically passed in conjunction with the state's operating budget.

Under the terms of the settlement and state statute, the Alaska Permanent Fund Corporation manages the cash principal. The Alaska Department of Natural Resources manages the land assets and a portfolio of directly owned real estate investments.

The Trust Authority operates similar to a private foundation to administer, protect, and enhance the Mental Health Trust. The Trust Authority provides leadership in the advocacy, planning, implementation, and funding of services and programs to help improve the lives of Trust beneficiaries. The Trust Authority also coordinates with other state agencies.

Alaska Municipal Bond Bank Authority

The Alaska Municipal Bond Bank Authority (AMBBA) lends monies to authorized borrowers within the state to finance capital projects, primarily through the issuance of AMBBA bonds. Bond proceeds are used to purchase authorized borrower's debt instruments. Limited State of Alaska credit support combined with a cross-collateralized loan portfolio and pooled reserve fund structure result in a strong credit rating, and enable AMBBA to sell bonds with lower interest rates than authorized borrowers could obtain on their own.

Between 1976 and 2018, the total State of Alaska-appropriated equity to AMBBA was \$33.4 million, with total transfers back to the state of \$27.8 million. For the last 11 years, the state's operating budget has not appropriated any AMBBA net earnings to AMBBA. Due to the low-interest rate environment experienced over the last several years, there has been no statutory net income amount available for transfer since FY 2011.

Alaska Railroad Corporation

The Alaska Railroad Corporation operates 683 track miles, providing both freight and passenger rail services between Seward and Fairbanks, including a spur line to Whittier and the Anchorage airport. The Alaska Railroad Corporation serves the ports of Whittier, Seward, and Anchorage, as well as Denali National Park and military installations. In addition, the corporation generates revenues from its real estate assets.

The state bought the railroad from the federal government in 1985. The purchase price of \$22.7 million was recorded as the state's capitalization. The corporation does not pay a cash dividend to Alaska's general fund, as the corporation's net position is restricted for reinvestment in infrastructure.

Alaska Seafood Marketing Institute

The Alaska Seafood Marketing Institute (ASMI) is a marketing organization with the mission of increasing the economic value of Alaska seafood. It conducts advertising campaigns and public relations for the seafood industry, and works directly with food service

distributors, retailers and restaurants to build the "Alaska seafood" brand. ASMI is a public-private partnership that receives funding from the state, federal government, and private industry.

The state levies the seafood marketing assessment, a 0.5% assessment on fisheries, to support ASMI's operations. In addition, in FY 2018, ASMI received \$4.2 million in federal funding and \$1.0 million from the state's general fund.

Alaska Student Loan Corporation

The Alaska Student Loan Corporation issues debt and recycles student loan payments to finance other student loans. Payments on student loans also provide funding for the corporation's operations.

In FY 1988, the State of Alaska transferred \$260 million of existing student loans to the corporation. Additional appropriations of cash between FY 1988 and FY 1992 totaled \$46.7 million.

The corporation, at the discretion of its board of directors, may make available to the state a return of contributed capital or dividend for any base year in which the net income of the corporation is \$2 million or more. A base year is defined as the year two years before the payment year. If the board authorizes a payment, it must be between 10% and 35% of net income for the base year (AS 14.42.295).

University of Alaska

The University of Alaska is a constitutionally created corporation of the State of Alaska that is authorized to hold title to real and personal property and to issue debt in its own name.

The University of Alaska system is the only public institution of higher learning in the state. It has a university in Anchorage, another in Fairbanks and a third in Juneau. The universities have extended satellite colleges and sites throughout the state. The system's main administrative offices are located on the Fairbanks campus. The University of Alaska system is governed by an 11-member Board of Regents, which is appointed by the governor.

The University of Alaska system is primarily supported by the state's general fund appropriations, student tuition and fees, as well as grant and contract revenue from the State of Alaska, federal agencies, and private sponsors, including the University of Alaska Foundation.

This page was intentionally left blank.



Appendices

Glossary

Constitutional Budget Reserve Fund (CBRF)

Created by voters in 1990, the CBRF receives proceeds from settlements of oil, gas, and mining tax and royalty disputes. The Alaska Legislature may, with a three-quarters majority vote in each chamber, withdraw money from the fund.

Designated General Fund Revenue

General fund revenue that is designated for a specific purpose, typically using a general fund subaccount. The Legislature can at any time remove the restrictions on this category of revenue as they are solely imposed by either Alaska statute or customary practice. At times, this category of revenue may be included in legislative and public debate over the budget.

Federal Revenue

When the federal government gives money to states, it typically restricts how that money can be used. For example, highway and airport construction funds, Medicaid, and education funding cannot be used for other purposes. In addition to restricting how the money is spent, the federal government often requires states to put up matching funds to qualify for the federal funding.

General Fund Revenue

General fund revenue has different meanings in different contexts. In the state's official financial reports, general fund revenue is used to designate the sum of general fund unrestricted revenue, general fund subaccount revenue, program receipts and other funds spent through the general fund. In budget reports, general fund revenue is split into revenue with no specific purpose, and revenue with a specific purpose. These categories are called unrestricted general fund revenue and designated general fund revenue, respectively.

General Fund Unrestricted Revenue

Revenue not restricted by the Alaska Constitution, state or federal law, trust or debt restrictions, or customary practice. This revenue is deposited into the state's unrestricted general fund and most legislative and public debate over the budget each year centers on this category of revenue. In deriving the Department of Revenue's unrestricted revenue figure from total general fund revenue, the department has excluded general fund subaccount revenue, as well as customar-

ily restricted revenue such as shared taxes and pass-through revenue for qualified fisheries associations. The department has also added specific revenue, such as transfers to the state treasury from the Unclaimed Property Trust and dividends from component units.

Other Restricted State Revenue

Non-federal revenue that is not deposited to the general fund or a subaccount of the general fund. This revenue is restricted by the Alaska Constitution, state or federal law, trust or debt restrictions, or by customary practice.

Percent of Market Value

Percent of market value (POMV) is a mechanism that is used to determine withdrawal amounts based on a percentage of a fund's total fair-market value balance, on preset dates, such as year-end.

Senate Bill 26, which the Legislature passed in 2018, uses a POMV framework to determine the amount of Permanent Fund earnings that is transferred out of the Permanent Fund each year.

Permanent Fund GASB (or Market) Income

Under standards adopted by the Governmental Accounting Standards Board (GASB), the Permanent Fund's income – and that of any other government fund – is the difference between the purchase price of the investments and their market value at a given point in time, plus any dividends, interest or rent earned on those investments. Under GASB standards, the Permanent Fund does not have to sell the investment to count the gain or loss as it changes value. It is called "marking to market," that is, measuring the value of the fund's investments by the current market price. This can produce a much different picture than Permanent Fund statutory income, which does not reflect fluctuating investment values until the assets are sold.

Permanent Fund Statutory Income

Historically, the annual Permanent Fund dividend is based on statutory income. This is the sum of realized gains and losses of all Permanent Fund investment transactions during the year, plus interest, dividends and rents earned by the fund. The Legislature may appropriate the earnings for any purpose it chooses. The historical practice has been to use realized income

primarily for dividends and inflation-proofing, and then either leave the excess in the realized earnings account, or transfer it to the principal of the Permanent Fund.

Restricted Program Receipts

This revenue is earmarked in state statute or by contract for specific purposes and is usually appropriated back to the program that generated the revenue. Examples include University of Alaska tuition payments, Alaska Marine Highway receipts, payments to various revolving loan funds, and public corporation receipts. Some of this revenue is actually dedicated as a consequence of provisions of the Alaska Constitution. The remainder, while statutorily earmarked, may be appropriated to purposes other than those reflected in statute if the Legislature so chooses. These earmarked funds are categorized as designated general funds.

Restricted Revenue

Restricted revenue represents revenue that is restricted by the Alaska Constitution, state or federal law, trust

or debt restrictions, or by customary practice. The Legislature can at any time remove restrictions that are solely imposed by either Alaska statute or customary practice. Program receipts, revenue allocated to subaccounts of the general fund, and general fund revenue customarily shared with other entities are all considered restricted revenue for the purposes of this report. In this report, the department presents three categories of restricted revenue: designated general fund revenue, other restricted state revenue, and federal revenue.

Revenue Available for Current-Year Appropriation

All revenue that is technically available for the Legislature to appropriate, regardless of customary practice. That includes general fund unrestricted revenue, designated general fund revenue, deposits to and earnings from the CBRF, a portion of deposits to the Permanent Fund, and realized earnings from the Permanent Fund.

Appendices

Acronyms

AAC	Alaska Aerospace Corporation	CY	Calendar year
ACES	Alaska's Clear and Equitable Share tax	DCCED	Department of Commerce, Community, and Economic Development
ACPE	Alaska Commission on Postsecondary Education	DEC	Department of Environmental Conservation
ACWI	All Country World Index	D/I	Data incomplete
AEA	Alaska Energy Authority	DNR	Department of Natural Resources
AGDC	Alaska Gasline Development Corporation	DOR	Department of Revenue
AHFC	Alaska Housing Finance Corporation	EIS	Environmental Impact Statement
AIDEA	Alaska Industrial Development and Export Authority	EMBI	Emerging Markets Bond Index
APFC	Alaska Permanent Fund Corporation	EPA	U.S. Environmental Protection Agency
AMBBA	Alaska Municipal Bond Bank Authority	ERG	Economic Research Group
AMHTA	Alaska Mental Health Trust Authority	FAST-41	Fixing America's Surface Transportation
ANS	Alaska North Slope	FBT	Fisheries business tax
ANWR	Arctic National Wildlife Refuge	FERC	Federal Energy Regulatory Commission
AOGCC	Alaska Oil and Gas Conservation Commission	FFY	Federal fiscal year
APFC	Alaska Permanent Fund Corporation	FID	Final Investment Decision
ARC	Alaska Railroad Corporation	FoF	Funds of Funds
AS	Alaska Statutes	FTSE	Financial Times Stock Exchange
ASAP	Alaska Stand Alone Pipeline	FY	Fiscal year
ASLC	Alaska Student Loan Corporation	GAAP	Generally Accepted Accounting Principles
ASMI	Alaska Seafood Marketing Institute	GASB	Governmental Accounting Standards Board
ATCCBC	Alaska Tax Credit Certificate Bond Corporation	G/C	Government/Credit index
bbl	Barrel of oil	GDP	Gross domestic product
BOE	Barrels of oil equivalent	GeFONSI	General fund and other non-segregated investments
Btu	British thermal unit	GFUR	General fund unrestricted revenue
CAFR	<i>Comprehensive Annual Financial Report</i>	GMT	Greater Moose's Tooth
CAPEX	Capital expenditures	GPMA	Greater Point McIntyre Area
CBRF	Constitutional Budget Reserve Fund	GVPP	Gross value at point of production
CDQ	Community development quota	GVR	Gross value reduction
CIT	Corporate income tax	HB 111	House Bill 111, passed in 2017
CFAL	Carried-Forward Annual Loss	HB 233	House Bill 233, passed in 2018
CP	Currently producing	HB 247	House Bill 247, passed in 2016
CPI-U	Consumer Price Index for All Urban Consumers	HB 331	House Bill 331, passed in 2018
CPV	Commercial passenger vessel	IRIS	Integrated Resource Information System

JDA	Joint Development Agreement	QCE	Qualified Capital Expenditure Credit
LLC	Limited Liability Corporation	QR	Quick response
LNG	Liquefied natural gas	RCA	Regulatory Commission of Alaska
LOI	Letter of Intent	REIT	Real Estate Investment Trusts
mcf	Thousand cubic feet	RIK	Royalty in kind
MLT	Mining license tax	RIV	Royalty in value
MFT	Motor fuel tax	RSA	Royalty settlement agreement
MSCI	Morgan Stanley Capital International	RSB	<i>Revenue Sources Book</i>
NAREIT	National Association of Real Estate Investment Trusts	S&P	Standard & Poor's
NEWS	North East West Sak	SB 21	Senate Bill 21, passed in 2013
NGL	Natural gas unit	SB 26	Senate Bill 26, passed in 2018
NOL	Net Operating Loss Credit	SBRF	Statutory Budget Reserve Fund
NPR-A	National Petroleum Reserve – Alaska	SCF	Strategic Contribution Fund
N/T	Not tracked	SEIS	Supplemental Environmental Impact Statement
NTSC	Northern Tobacco Securitization Corporation	SLA	Session Laws of Alaska
OCS	Outer Continental Shelf	SSSLA	Second Special Session Laws of Alaska
OMB	Office of Management and Budget	TAPS	Trans-Alaska Pipeline System
OPEC	Organization of Petroleum Exporting Countries	TIPS	Treasury Inflation Protected Securities
OPEX	Operating expenditures	TR	Thompson Reuters
PBU	Prudhoe Bay Unit	UA	University of Alaska
POD	Plan of Development	UD	Under development
POMV	Percent of Market Value	UE	Under evaluation
PSCA	Pacific Spaceport Complex	WLE	Well Lease Expenditure Credit
PSTF	Public School Trust Fund	WTI	West Texas Intermediate
PTV	Production tax value		

Unrestricted General Fund Revenue Matrices

Revenue sensitivity to oil price

Millions of Dollars

FY 2019		FY 2020		FY 2021	
At forecasted ANS production of 526,800 barrels per day		At forecasted ANS production of 533,200 barrels per day		At forecasted ANS production of 514,200 barrels per day	
Alaska North Slope Dollars per Barrel ¹	Unrestricted General Fund Revenue	Alaska North Slope Dollars per Barrel	Unrestricted General Fund Revenue	Alaska North Slope Dollars per Barrel	Unrestricted General Fund Revenue
\$30	N/A	\$30	\$4,130	\$30	\$4,260
\$40	\$4,510	\$40	\$4,410	\$40	\$4,530
\$50	\$4,830	\$50	\$4,700	\$50	\$4,820
\$60	\$5,150	\$60	\$5,020	\$60	\$5,140
\$67.96	\$5,495	\$64.00	\$5,198	\$66.00	\$5,394
\$70	\$5,640	\$70	\$5,530	\$70	\$5,570
\$80	\$6,360	\$80	\$6,220	\$80	\$6,220
\$90	\$7,280	\$90	\$7,030	\$90	\$7,010
\$100	\$8,090	\$100	\$7,860	\$100	\$7,820
\$110	\$9,020	\$110	\$8,710	\$110	\$8,640
\$120	\$9,950	\$120	\$9,550	\$120	\$9,460
\$130	\$10,790	\$130	\$10,390	\$130	\$10,280

¹Alaska North Slope dollars per barrel values are fiscal-year averages that incorporate actual prices for the first five months of FY 2019. Because oil prices averaged \$74.90 for the first five months, it can take a different price for the remainder of the year to bring the fiscal-year average to levels in the table. For example, a fiscal-year price of \$60 per barrel would require seven months of oil prices around \$49 per barrel.

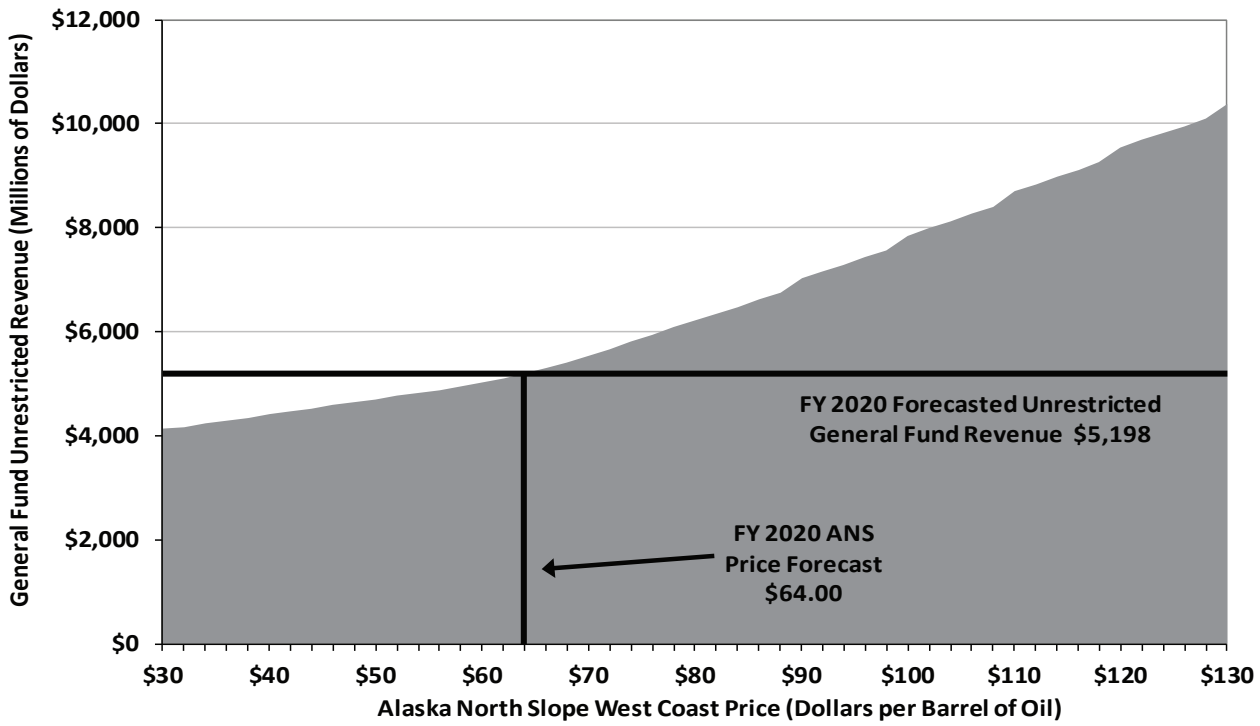
Note:

This table presents estimated general fund unrestricted revenue at a range of ANS prices, holding all other variables constant. Analysis assumes that the given price is in place for all three years shown. Only production tax, royalties, corporate income tax, and lease expenditures are adjusted for purposes of this analysis. Users should be cautioned that changes in any number of variables may cause revenue to vary significantly from amounts shown. These variables include but are not limited to production volumes and netback costs. In addition, revenues may vary from the amount shown due to changes in company decision-making, company-specific tax calculation issues, month-to-month variations in price or production, and changes in non-oil revenue.

A

GFUR Relative to Price Per Barrel

Price sensitivity for FY 2020



History of Unrestricted General Fund Revenue¹

By type and category

Millions of Dollars

Fiscal Year	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Unrestricted General Fund Tax Revenue										
Petroleum Property Tax	111.2	118.8	110.6	111.2	99.3	128.1	125.2	111.7	120.4	121.6
Excise Tax										
Alcoholic Beverages	19.5	19.5	19.4	19.4	19.8	18.3	17.7	22.2	20.1	19.6
Tobacco Products	46.6	45.1	46.5	45.6	44.8	42.8	40.5	45.5	43.4	37.4
Insurance Premium ²	45.5	50.4	49.6	54.8	52.4	54.6	59.1	0.0	0.0	0.0
Electric and Telephone Cooperative	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Marijuana ³	NA	NA	NA	NA	NA	NA	NA	NA	0.9	5.4
Motor Fuel Tax	10.1	28.8	39.5	40.9	41.9	41.9	41.8	44.3	41.3	6.3
Vehicle Rental Tax ⁴	8.0	7.3	8.3	8.5	8.4	8.3	9.7	0.0	0.0	0.0
Tire Fee	1.5	1.4	1.5	1.4	1.4	1.3	1.5	1.5	1.4	1.4
Total Excise Tax	131.3	152.6	164.9	170.8	168.9	167.5	170.5	113.6	107.3	70.4
Income Tax										
General Corporate	120.9	81.9	157.7	98.5	112.5	99.9	136.2	90.2	86.5	119.6
Petroleum Corporate	492.2	446.1	542.1	568.8	434.6	307.6	94.8	-58.8	-59.4	67.9
Total Income Tax	613.1	528.0	699.8	667.3	547.1	407.5	231.0	31.4	27.1	187.4
Oil and Gas Production										
Oil and Gas Production Tax	3,100.9	2,860.7	4,543.2	6,136.7	4,042.5	2,605.9	381.6	176.8	125.9	741.2
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Hazardous Release	11.1	10.3	9.7	9.4	7.8	8.8	8.1	9.2	8.6	8.7
Total Oil and Gas Production	3,112.0	2,871.0	4,552.9	6,146.1	4,050.3	2,614.7	389.7	186.0	134.4	749.9
Fish Tax										
Fisheries Business Tax	19.3	14.0	20.1	26.4	19.2	25.1	21.3	22.3	15.5	21.2
Fishery Resource Landing Tax	4.7	8.3	2.7	6.3	5.5	7.1	5.1	0.3	4.9	3.5
Total Fish Tax	24.0	22.3	22.8	32.7	24.7	32.2	26.4	22.6	20.3	24.7
Other Tax										
Estate	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining	15.5	29.7	49.0	40.7	46.7	23.3	38.6	10.7	41.4	46.9
Charitable Gaming	2.8	2.6	2.5	2.6	2.5	2.5	2.5	2.6	2.5	2.4
Large Passenger Vessel Gambling	6.3	6.3	5.8	5.2	6.0	6.7	6.6	7.7	8.2	8.6
Total Other Tax	24.8	38.6	57.3	48.5	55.2	32.5	47.7	21.1	52.0	57.9
Total Unrestricted General Fund Tax Revenue	4,016.4	3,731.3	5,608.3	7,176.6	4,945.5	3,382.5	990.5	486.4	461.6	1,212.0

(Table continued, next page)

History of Unrestricted General Fund Revenue¹

By type and category (Continued)

Millions of Dollars

Fiscal Year	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Unrestricted General Fund Non-Tax Revenue										
Licenses and Permits⁵	35.5	39.5	42.8	42.3	41.9	42.7	34.4	41.2	45.6	37.1
Intergovernmental Receipts										
Federal Shared Revenues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges for Services	19.3	17.1	18.5	29.2	25.2	24.2	20.1	21.5	21.5	7.0
Fines and Forfeitures	10.5	10.4	7.0	10.9	15.8	11.3	11.5	11.4	13.2	12.5
Rents and Royalties										
Oil and Gas Royalties ⁶	1,451.2	1,469.0	1,821.3	2,022.8	1,748.4	1,685.0	1,052.1	840.3	676.2	977.8
Oil and Gas Bonuses, Rents, Interest ^{6,7}	14.4	8.0	22.0	8.9	19.4	27.4	26.1	30.3	5.3	24.5
Other ⁸	15.6	13.2	17.6	20.4	24.7	34.5	36.3	24.7	27.4	5.8
Total Rents and Royalties	1,481.2	1,490.2	1,860.9	2,052.1	1,792.5	1,746.9	1,114.5	895.3	708.9	1,008.1
Investment Earnings	247.6	184.0	96.3	107.8	28.1	130.2	47.9	22.5	17.3	16.3
Miscellaneous Revenue⁹	27.0	40.8	39.1	66.3	79.5	52.3	37.5	54.4	86.5	131.2
Total Unrestricted General Fund Non-Tax Revenue	1,821.1	1,782.0	2,064.6	2,308.6	1,983.0	2,007.6	1,265.8	1,046.3	893.0	1,212.1
Total Unrestricted General Fund Revenue	5,837.5	5,513.3	7,672.9	9,485.2	6,928.5	5,390.1	2,256.3	1,532.7	1,354.6	2,424.1

¹ Unrestricted general fund revenue includes revenue that is not restricted by statute or custom, as reported elsewhere in this publication. A summary of historical unrestricted general fund revenue can be found on the Tax Division's website at www.tax.alaska.gov/sourcesbook/qr.aspx?Chapter=15&FY=2018.

² Starting in FY 2016, these revenues are deposited into a subfund of the general fund and are considered restricted.

³ In November 2014, Alaska voters voted to legalize marijuana. The state's first collections from the marijuana excise tax were in FY 2017.

⁴ Starting in FY 2016, to be consistent with other budget documents, vehicle rental tax is now classified as designated general fund revenue.

⁵ Starting in FY 2016, to be consistent with other budget documents, revenue from alcoholic beverage licenses is now classified as designated general fund revenue.

⁶ Net of Permanent Fund, Public School Trust Fund, and Constitutional Budget Reserve Fund deposits.

⁷ This category is primarily composed of petroleum revenue.

⁸ Includes non-petroleum rents and royalties.

⁹ Starting in FY 2010, dividends and payments from state-owned corporations are included in unrestricted miscellaneous revenue.

Petroleum Revenue

By restriction and type

Millions of Dollars

History¹

Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Unrestricted Petroleum Revenue										
Petroleum Property Tax	111.2	118.8	110.6	111.2	99.3	128.1	125.2	111.7	120.4	121.6
Petroleum Corporate Income Tax	492.2	446.1	542.1	568.8	434.6	307.6	94.8	-58.8	-59.4	67.9
Production Tax	3,100.9	2,860.7	4,543.2	6,136.7	4,042.5	2,605.9	381.6	176.8	125.9	741.2
Oil and Gas Hazardous Release	11.1	10.3	9.7	9.4	7.8	8.8	8.1	9.2	8.6	8.7
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Royalties ²	1,451.2	1,469.0	1,821.3	2,022.8	1,748.4	1,685.0	1,052.1	840.3	676.2	977.8
Bonuses, Rents and Interest ^{2,3}	14.4	8.0	22.0	8.9	19.4	27.4	26.1	30.3	5.3	24.5
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Unrestricted Petroleum Revenue	5,181.0	4,912.9	7,048.9	8,857.8	6,352.0	4,762.8	1,687.9	1,109.5	876.9	1,941.7
Cumulative Total Unrestricted Petroleum Revenue⁴										
	81,428	86,340	93,389	102,247	108,599	113,362	115,050	116,159	117,036	118,978
Restricted Petroleum Revenue										
NPR-A Rents, Royalties, Bonuses	14.8	21.3	3.0	4.8	3.6	6.8	3.2	1.8	1.4	23.7
Royalties to Permanent Fund	659.8	696.1	857.3	904.9	842.1	773.7	510.4	390.5	334.5	356.1
Royalties to Public School Trust Fund	11.0	11.1	13.6	14.7	13.8	12.5	7.9	6.4	5.5	7.0
Constitutional Budget Reserve Fund Deposits	202.6	552.7	167.3	102.8	357.4	177.4	149.9	119.1	481.9	121.3
Total Restricted Petroleum Revenue	888.2	1,281.2	1,041.2	1,027.2	1,216.9	970.4	671.4	517.8	823.2	508.0

(Table continued, next page)

Petroleum Revenue

By restriction and type *(Continued)*

Millions of Dollars

Forecast

Fiscal Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Unrestricted Petroleum Revenue										
Petroleum Property Tax	126.1	119.0	116.5	114.9	113.6	111.9	110.1	108.3	106.4	104.4
Petroleum Corporate Income Tax	195.0	210.0	210.0	215.0	220.0	220.0	230.0	240.0	240.0	240.0
Production Tax	806.6	470.5	512.3	468.5	458.6	450.2	425.5	495.3	598.7	736.5
Oil and Gas Hazardous Release	8.8	8.8	8.5	8.1	7.8	7.7	7.7	7.9	8.0	8.1
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Royalties ²	1,051.9	865.3	855.4	835.4	826.8	815.8	829.9	862.5	886.2	920.2
Bonuses, Rents and Interest ^{2,3}	22.8	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Unrestricted Petroleum Revenue	2,211.1	1,688.9	1,717.8	1,657.1	1,642.0	1,620.8	1,618.4	1,729.2	1,854.6	2,024.3
Cumulative Total Unrestricted Petroleum Revenue⁴										
	121,189	122,878	124,596	126,253	127,895	129,516	131,134	132,863	134,718	136,742
Restricted Petroleum Revenue										
NPR-A Rents, Royalties, Bonuses	7.2	11.3	11.1	11.3	16.8	36.5	59.3	83.9	103.1	122.8
Royalties to Permanent Fund	363.8	388.2	379.7	369.7	376.7	394.9	429.5	480.7	525.1	573.2
Royalties to Public School Trust Fund	7.2	6.4	6.3	6.1	6.1	6.2	6.4	6.8	7.2	7.6
Constitutional Budget Reserve Fund Deposits	125.0	150.0	125.0	100.0	75.0	50.0	50.0	50.0	50.0	50.0
Total Restricted Petroleum Revenue	503.3	555.9	522.1	487.1	474.7	487.6	545.3	621.5	685.4	753.6

¹ Historical petroleum revenue can be found on the Tax Division's website at www.tax.alaska.gov/sourcesbook/qr.aspx?Chapter=16&FY=2018.

² Net of Permanent Fund, Public School Trust Fund, and CBRF deposits.

³ This category is primarily petroleum revenue.

⁴ Based on revenue beginning in FY 1959.

Unrestricted General Fund Revenue

Petroleum versus non-petroleum revenue

Millions of Dollars

History

Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Unrestricted General Fund Revenue										
Total Unrestricted Petroleum Revenue	5,181.0	4,912.9	7,048.9	8,857.8	6,352.0	4,762.8	1,687.9	1,109.5	876.9	1,941.7
Unrestricted General Fund Non-Petroleum Revenue	656.5	600.4	624.0	627.4	576.5	627.3	568.4	423.2	477.7	482.4
Total Unrestricted General Fund Revenue	5,837.5	5,513.3	7,672.9	9,485.2	6,928.5	5,390.1	2,256.3	1,532.7	1,354.6	2,424.1
Percent of Total Unrestricted General Fund Revenue from Petroleum	89%	89%	92%	93%	92%	88%	75%	72%	65%	80%

(Table continued, next page)

Unrestricted General Fund Revenue

Petroleum versus non-petroleum revenue *(Continued)*

Millions of Dollars

Forecast

Fiscal Year	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Unrestricted General Fund Revenue										
Total Unrestricted Petroleum Revenue	2,211.1	1,688.9	1,717.8	1,657.1	1,642.0	1,620.8	1,618.4	1,729.2	1,854.6	2,024.3
Unrestricted General Fund Non-Petroleum Revenue	3,283.9	3,509.1	3,676.0	3,687.7	3,858.2	3,975.5	4,052.0	4,135.7	4,219.7	4,296.4
Total Unrestricted General Fund Revenue	5,495.0	5,198.0	5,393.8	5,344.8	5,500.2	5,596.3	5,670.4	5,864.9	6,074.3	6,320.7
Percent of Total Unrestricted General Fund Revenue from Petroleum	40%	32%	32%	31%	30%	29%	29%	29%	31%	32%

Nominal Netback Costs, Actual and Forecast

By netback segment

Fiscal Year	Dollars per Barrel									
	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alaska North Slope West Coast	68.34	74.90	94.49	112.65	107.57	107.57	72.58	43.18	49.43	63.61
Netback Costs¹										
Marine Costs	2.05	2.21	2.44	3.24	3.64	3.70	3.25	3.15	3.18	3.28
TAPS Tariff	4.59	3.81	4.02	5.06	5.93	6.52	6.11	6.25	6.09	5.84
Feeder Tariff	0.31	0.31	0.29	0.31	0.35	0.38	0.42	0.39	0.45	0.41
Quality Bank	-0.52	-0.41	-0.54	-0.68	-0.67	-0.59	-0.37	-0.04	-0.16	-0.17
Other ²	-0.05	0.09	0.46	0.44	0.51	0.41	0.33	0.13	0.15	0.17
Total of Netback Costs	6.38	6.01	6.67	8.37	9.76	10.42	9.74	9.88	9.70	9.52
ANS Wellhead Weighted Average All Destinations	61.96	68.89	87.82	104.28	97.81	97.15	62.83	33.30	39.73	54.09

(Table continued, next page)

Nominal Netback Costs, Actual and Forecast

By netback segment *(Continued)*

Fiscal Year	Dollars per Barrel									
	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Alaska North Slope West Coast	67.96	64.00	66.00	67.00	69.00	70.00	72.00	74.00	75.00	77.00
Netback Costs¹										
Marine Costs	3.36	3.39	3.43	3.47	3.52	3.55	3.60	3.65	3.69	3.74
TAPS Tariff	4.86	4.98	5.16	5.65	6.09	6.25	6.29	6.29	6.33	6.52
Feeder Tariff	0.49	0.48	0.50	0.52	0.54	0.55	0.56	0.57	0.59	0.63
Quality Bank	-0.37	-0.38	-0.40	-0.40	-0.42	-0.44	-0.46	-0.47	-0.46	-0.45
Other ²	0.19	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.20
Total of Netback Costs	8.53	8.64	8.88	9.42	9.91	10.10	10.18	10.23	10.35	10.64
ANS Wellhead Weighted Average All Destinations	59.43	55.36	57.12	57.58	59.09	59.90	61.82	63.77	64.65	66.36

¹ Field-specific transportation costs represent the average cost for all barrels, whether or not they incur a specific expense. For example, feeder costs represent the average cost for all barrels, including Prudhoe Bay production not using a feeder pipeline. Slopewide costs are estimated based on reported relevant cost information. The Department of Revenue's data sources are variable and the department has not been able to confirm that these calculations are consistent for all years.

² Primarily tanker and pipeline gains or losses.

Price Difference

Spring 2018 forecast and fall 2018 forecast

Fiscal Year	Dollars per Barrel									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Spring 2018 Forecast										
ANS West Coast	61.00	63.00	64.00	66.00	67.00	69.00	70.00	72.00	74.00	75.00
ANS Wellhead Weighted Average All Destinations	51.67	54.13	55.05	56.90	57.45	59.01	59.84	61.75	63.59	64.37
Fall 2018 Forecast										
ANS West Coast	63.61	67.96	64.00	66.00	67.00	69.00	70.00	72.00	74.00	75.00
ANS Wellhead Weighted Average All Destinations	54.09	59.43	55.36	57.12	57.58	59.09	59.90	61.82	63.77	64.65
Dollar Amount Change from Prior Forecast										
ANS West Coast	2.61	4.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANS Wellhead Weighted Average All Destinations	2.42	5.30	0.31	0.22	0.13	0.08	0.06	0.07	0.18	0.28
Percent Change from Prior Forecast										
ANS West Coast	4.3%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ANS Wellhead Weighted Average All Destinations	4.7%	9.8%	0.6%	0.4%	0.2%	0.1%	0.1%	0.1%	0.3%	0.4%

Production Difference

Spring 2018 forecast and fall 2018 forecast

Thousand Barrels per Day

Fiscal Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Spring 2018 Forecast										
Alaska North Slope	521.8	526.6	536.1	525.3	508.7	496.9	493.9	495.3	495.9	493.0
Non-North Slope	17.7	22.1	18.2	15.8	14.5	13.6	12.9	12.4	11.9	11.4
Total	539.6	548.7	554.3	541.1	523.2	510.5	506.8	507.7	507.7	504.4
Fall 2018 Forecast										
Alaska North Slope	518.4	526.8	533.2	514.2	493.2	476.7	470.0	472.7	484.1	493.4
Non-North Slope	15.7	13.8	11.6	10.2	9.3	8.5	7.7	7.0	6.4	5.8
Total	534.0	540.6	544.8	524.4	502.5	485.2	477.8	479.7	490.5	499.2
Volume Change from Prior Forecast										
Alaska North Slope	-3.5	0.1	-2.9	-11.1	-15.5	-20.3	-23.9	-22.6	-11.8	0.3
Non-North Slope	-2.1	-8.3	-6.6	-5.6	-5.2	-5.1	-5.2	-5.4	-5.5	-5.6
Total	-5.6	-8.1	-9.6	-16.7	-20.7	-25.3	-29.1	-27.9	-17.2	-5.2
Percent Change from Prior Forecast										
Alaska North Slope	-0.7%	0.0%	-0.5%	-2.1%	-3.1%	-4.1%	-4.8%	-4.6%	-2.4%	0.1%
Non-North Slope	-11.7%	-37.4%	-36.5%	-35.7%	-35.8%	-37.5%	-40.4%	-43.4%	-46.2%	-49.1%
Total	-1.0%	-1.5%	-1.7%	-3.1%	-4.0%	-5.0%	-5.7%	-5.5%	-3.4%	-1.0%

Annual Average Daily Crude Oil Production

By production area

Thousand Barrels per Day

Fiscal Year	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017 ¹	2018
Alaska North Slope										
Prudhoe Bay ^{2,3}	291.4	276.7	267.6	265.2	247.4	247.5	228.5	232.1	239.8	218.2
PBU Satellites ^{2,4}	67.9	63.1	55.4	50.7	46.5	44.3	41.4	44.0	38.9	41.8
Greater Point McIntyre Area ⁵	38.5	34.0	30.8	29.7	26.3	26.2	22.4	23.3	27.7	30.5
Kuparuk	105.6	99.2	91.0	91.6	86.4	85.9	78.5	78.4	80.6	82.8
Kuparuk Satellites ⁶	36.9	35.0	31.9	27.5	25.3	25.1	26.6	26.0	24.4	27.5
Endicott ⁷	14.2	12.7	11.7	11.3	10.4	9.5	9.0	9.1	8.6	8.1
Alpine ⁸	106.7	93.5	84.6	78.2	64.5	56.8	47.8	55.2	58.9	64.6
Offshore ⁹	31.5	28.4	27.0	25.2	24.8	35.0	46.8	46.4	44.3	40.4
NPR-A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Point Thomson	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.1	4.4
Other ¹⁰	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alaska North Slope	692.8	642.6	599.9	579.3	531.6	530.4	501.0	514.7	526.4	518.4
Cook Inlet	10.1	8.9	10.4	10.7	12.2	16.3	18.3	16.6	14.1	15.7
Total Alaska	702.9	651.5	610.3	590.0	543.8	546.6	519.2	531.3	540.5	534.0

(Table continued, next page)

Annual Average Daily Crude Oil Production

By production area (*Continued*)

Thousand Barrels per Day

Fiscal Year	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Alaska North Slope										
Prudhoe Bay	221.9	218.4	214.3	209.8	200.6	191.8	184.6	178.2	172.4	167.0
PBU Satellites ⁴	41.8	40.5	39.0	38.6	38.4	38.6	39.9	40.5	38.1	34.9
Greater Point McIntyre Area ⁵	25.9	22.1	19.9	18.1	16.5	15.1	13.9	12.9	12.0	11.2
Kuparuk	79.7	82.5	81.6	80.7	76.7	73.1	70.5	68.4	66.6	64.9
Kuparuk Satellites ⁶	36.5	35.5	31.6	29.4	27.8	26.5	25.4	24.4	23.5	22.7
Endicott ⁷	9.1	8.1	7.3	6.6	6.0	5.5	5.1	4.7	4.3	4.0
Alpine ⁸	58.4	70.6	70.9	65.0	63.7	63.6	59.8	53.8	47.9	43.1
Offshore ⁹	38.6	33.6	29.2	26.1	25.4	22.7	20.4	18.9	17.5	16.3
NPR-A	10.4	15.4	13.6	12.2	14.6	23.5	33.5	43.8	50.7	56.8
Point Thomson	4.5	6.6	6.8	6.8	6.8	6.8	6.8	6.7	6.5	6.0
Other ¹⁰	0.0	0.0	0.0	0.0	0.2	2.9	12.8	31.9	53.8	71.9
Total Alaska North Slope	526.8	533.2	514.2	493.2	476.7	470.0	472.7	484.1	493.4	498.8
Cook Inlet	13.8	11.6	10.2	9.3	8.5	7.7	7.0	6.4	5.8	5.2
Total Alaska	540.6	544.8	524.4	502.5	485.2	477.8	479.7	490.5	499.2	504.0

¹ FY 2017 production figures have been revised from the *Fall 2017 Revenue Sources Book* due to revised company submissions.

² Milne Point Unit production is now being reported with PBU Satellites instead of with PBU volume. Historical volumes, therefore, will not match the *Fall 2011 Revenue Sources Book*.

³ Includes NGLs from Central Gas Facility shipped to TAPS.

⁴ Aurora, Borealis, Midnight Sun, Orion, Polaris, Milne Point, Sag River, Schrader Bluff, Ugnu.

⁵ Lisburne, Niakuk, Point McIntyre, Raven, West Beach, West Niakuk.

⁶ Meltwater, NEWS, Tabasco, Tarn, West Sak.

⁷ Endicott, Minke, Sag Delta, Eider, Badami.

⁸ Alpine, Fiord, Nanuq, Qannik, Mustang, Fiord West.

⁹ Northstar, Ooguruk, Nikaitchuq, Liberty.

¹⁰ Projects under evaluation that are outside of the preceding areas. Includes Pikka, Placer, Smith Bay, Guitar, Narwhal.

Note: Totals may show slight differences from other sources due to rounding and aggregation differences.

Lease Expenditures

Operating and capital expenditures by geographic region

Millions of Dollars

Fiscal Year	History									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
North Slope Lease Expenditures										
Operating Expenditures [OPEX]	2,085	2,270	2,614	3,001	3,110	3,254	3,439	3,267	2,925	2,649
Capital Expenditures [CAPEX]	2,212	2,389	2,317	2,383	2,969	3,738	3,992	3,387	1,875	1,729
Total North Slope Lease Expenditures	4,297	4,659	4,931	5,385	6,079	6,992	7,431	6,654	4,801	4,379
Non-North Slope (includes Cook Inlet)										
Operating Expenditures [OPEX]	201	165	191	245	261	252	242	285	285	283
Capital Expenditures [CAPEX]	341	168	123	350	415	595	640	382	314	257
Total Non-North Slope Lease Expenditures	542	332	314	594	676	848	881	668	598	540
Total Statewide Lease Expenditures										
Operating Expenditures [OPEX]	2,286	2,435	2,805	3,246	3,370	3,506	3,680	3,552	3,210	2,932
Capital Expenditures [CAPEX]	2,553	2,557	2,440	2,733	3,384	4,333	4,632	3,769	2,189	1,987
Total Statewide Lease Expenditures	4,839	4,991	5,245	5,979	6,754	7,839	8,312	7,322	5,399	4,919
Additional Detail for North Slope Lease Expenditures										
Operating Expenditures [OPEX]										
Producing Non-GVR Eligible Units	2,040	2,182	2,488	2,838	2,879	3,021	3,161	2,921	2,575	2,326
Other Operating Expenditures	45	88	126	163	231	233	278	346	350	323
Total North Slope OPEX	2,085	2,270	2,614	3,001	3,110	3,254	3,439	3,267	2,925	2,649
Capital Expenditures [CAPEX]										
Producing Non-GVR Eligible Units	1,648	1,343	1,370	1,367	1,563	2,191	2,454	1,921	1,450	1,370
Other Capital Expenditures	564	1,046	947	1,016	1,406	1,547	1,538	1,466	425	359
Total North Slope CAPEX	2,212	2,389	2,317	2,383	2,969	3,738	3,992	3,387	1,875	1,729

(Table continued, next page)

Lease Expenditures

Operating and capital expenditures by geographic region *(Continued)*

Millions of Dollars

Fiscal Year	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
North Slope Lease Expenditures										
Operating Expenditures [OPEX]	2,715	2,823	2,816	2,827	2,919	3,062	3,107	3,117	3,089	3,101
Capital Expenditures [CAPEX]	1,901	2,604	3,148	3,146	2,606	2,443	2,410	2,381	2,194	2,066
Total North Slope Lease Expenditures	4,616	5,428	5,964	5,974	5,525	5,505	5,516	5,498	5,284	5,167
Non-North Slope (includes Cook Inlet)										
Operating Expenditures [OPEX]	282	249	249	238	236	235	237	240	243	246
Capital Expenditures [CAPEX]	182	161	136	126	126	129	132	135	138	141
Total Non-North Slope Lease Expenditures	464	411	385	363	362	364	369	375	381	387
Total Statewide Lease Expenditures										
Operating Expenditures [OPEX]	2,998	3,073	3,065	3,065	3,155	3,297	3,344	3,357	3,333	3,348
Capital Expenditures [CAPEX]	2,082	2,766	3,284	3,272	2,732	2,572	2,541	2,516	2,332	2,207
Total Statewide Lease Expenditures	5,080	5,838	6,349	6,337	5,887	5,868	5,886	5,873	5,665	5,554
Additional Detail for North Slope Lease Expenditures										
Operating Expenditures [OPEX]										
Producing Non-GVR Eligible Units	2,330	2,361	2,532	2,735	2,786	2,891	3,001	3,100	3,066	3,101
Other Operating Expenditures	385	463	284	92	133	170	106	17	23	1
Total North Slope OPEX	2,715	2,823	2,816	2,827	2,919	3,062	3,107	3,117	3,089	3,101
Capital Expenditures [CAPEX]										
Producing Non-GVR Eligible Units	1,235	1,521	1,557	1,410	1,500	1,478	1,901	2,064	2,059	2,058
Other Capital Expenditures	665	1,084	1,591	1,737	1,106	965	508	316	136	8
Total North Slope CAPEX	1,901	2,604	3,148	3,146	2,606	2,443	2,410	2,381	2,194	2,066

Production Tax Estimate for FY 2018

Using income statement format

Note: This table presents an approximation of the production tax calculation, and does not match production tax estimates throughout this publication.

	Price	Barrels (Thousands)	Value (Millions of Dollars)
Average ANS Oil Price (dollars per barrel) and Daily Production	\$63.61	518.4	\$33.0
Annual Production			
Total		189,216	\$12,036.0
Royalty, Federal and Other Barrels ¹		-22,704	(\$1,444.2)
Taxable barrels		166,512	\$10,591.8
Downstream (Transportation) Costs (dollars per barrel)			
ANS Marine Transportation	-\$3.28		
TAPS Tariff	-\$5.84		
Other	-\$0.41		
Total Transportation Costs	-\$9.52	166,512	(\$1,585.7)
Gross Value at Point of Production (GVPP)			\$9,006.1
Deductible Lease Expenditures²			
Deductible Operating Expenditures	-\$15.50		(\$2,581.0)
Deductible Capital Expenditures	-\$8.92		(\$1,485.1)
Total Lease Expenditures	-\$24.42	166,512	(\$4,066.1)
Production Tax			
Gross Minimum Tax (4%*GVPP)			\$360.2
Production Tax Value (PTV)			\$4,940.0
Gross Value Reduction (GVR)			(\$91.1)
Production Tax Value (PTV) After GVR			\$4,848.9
Base Tax (35%*PTV After GVR)			\$1,697.1
Current-Year Tax Before Credits (base tax or minimum tax)			\$1,697.1
Per-Taxable-Barrel Credits			(\$1,026.6)
Current-Year Tax After Per-Taxable-Barrel Credits			\$670.6
Adjustments³			\$79.3
Total Tax After Credits and Adjustments			\$749.9

¹Royalty, Federal and Other Barrels represents the Department of Revenue's best estimate of barrels that are not taxed. This estimate includes state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production.

²Deductible Lease Expenditures represents the department's best estimate of lease expenditures that are applicable to companies that are likely to have a tax liability for the year. The per-barrel expenditures reflect expenditures per taxable barrel and are higher than if this was shown as expenditures per all barrels produced.

³Adjustments include:

- Any credits other than Per-Taxable-Barrel Credits, such as Small-Producer Credits or Net Operating Loss Credits from prior years.
- Private landowner royalty tax, and conservation surcharge.
- Cook Inlet production tax.
- Any prior-year tax payments other than those deposited into the Constitutional Budget Reserve Fund (CBRF). For FY 2018, this includes supplemental payments to correct FY 2017 underpayments
- Additional detail captured in company-specific revenue models that produces results that can differ slightly from the estimates in the simple model above.

Production Tax Estimate for FY 2019

Using income statement format

Note: This table presents an approximation of the production tax calculation, and does not match production tax estimates throughout this publication.

	Price	Barrels (Thousands)	Value (Millions of Dollars)
Average ANS Oil Price (dollars per barrel) and Daily Production	\$67.96	526.8	\$35.8
Annual Production			
Total		192,277	\$13,067.1
Royalty, Federal and Other Barrels ¹		-22,576	(\$1,534.3)
Taxable Barrels		169,701	\$11,532.8
Downstream (Transportation) Costs (dollars per barrel)			
ANS Marine Transportation	-\$3.36		
TAPS Tariff	-\$4.86		
Other	-\$0.31		
Total Transportation Costs	-\$8.53	169,701	(\$1,447.9)
Gross Value at Point of Production (GVPP)			\$10,084.9
Deductible Lease Expenditures²			
Deductible Operating Expenditures	-\$15.46		(\$2,640.9)
Deductible Capital Expenditures	-\$9.64		(\$1,635.5)
Total Lease Expenditures	-\$25.20	169,701	(\$4,276.4)
Production Tax			
Gross Minimum Tax (4%*GVPP)			\$403.4
Production Tax Value (PTV)			\$5,808.6
Gross Value Reduction (GVR)			(\$134.1)
Production Tax Value (PTV) after GVR			\$5,674.5
Base Tax (35%*PTV after GVR)			\$1,986.1
Current-Year Tax Before Credits (base tax or minimum tax)			\$1,986.1
Per-Taxable-Barrel Credits			(\$1,245.1)
Current-Year Tax After Per-Taxable-Barrel Credits			\$741.0
Adjustments³			\$74.4
Total Tax After Credits and Adjustments			\$815.4

¹Royalty, Federal and Other Barrels represents the Department of Revenue's best estimate of barrels that are not taxed. This estimate includes state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production.

²Deductible Lease Expenditures represents the department's best estimate of lease expenditures that are applicable to companies that are likely to have a tax liability for the year. The per-barrel expenditures reflect expenditures per taxable barrel and are higher than if this was shown as expenditures per all barrels produced.

³Adjustments include:

- Any credits other than Per-Taxable-Barrel Credits, such as Small-Producer Credits or Net Operating Loss Credits from prior years.
- Private landowner royalty tax, and conservation surcharge.
- Cook Inlet production tax.
- Any prior-year tax payments other than those deposited into the Constitutional Budget Reserve Fund.
- Additional detail captured in company-specific revenue models that produces results that can differ slightly from the estimates in the simple model above.

Production Tax Estimate for FY 2020

Using income statement format

Note: This table presents an approximation of the production tax calculation, and does not match production tax estimates throughout this publication.

	Price	Barrels (Thousands)	Value (Millions of Dollars)
Average ANS Oil Price (dollars per barrel) and Daily Production	\$64.00	533.2	\$34.1
Annual Production			
Total		195,150	\$12,489.6
Royalty, Federal and Other Barrels ¹		-22,037	(\$1,410.4)
Taxable Barrels		173,113	\$11,079.2
Downstream (Transportation) Costs (dollars per barrel)			
ANS Marine Transportation	-\$3.39		
TAPS Tariff	-\$4.98		
Other	-\$0.28		
Total Transportation Costs	-\$8.64	173,113	(\$1,495.8)
Gross Value at Point of Production (GVPP)			\$9,583.4
Deductible Lease Expenditures²			
Deductible Operating Expenditures	-\$15.61		(\$2,702.8)
Deductible Capital Expenditures	-\$11.75		(\$2,034.7)
Total Lease Expenditures	-\$27.37	173,113	(\$4,737.5)
Production Tax			
Gross Minimum Tax (4%*GVPP)			\$383.3
Production Tax Value (PTV)			\$4,845.9
Gross Value Reduction (GVR)			(\$108.6)
Production Tax Value (PTV) after GVR			\$4,737.3
Base Tax (35%*PTV after GVR)			\$1,658.1
Current-Year Tax Before Credits (base tax or minimum tax)			\$1,658.1
Per-Taxable-Barrel Credits			(\$1,190.1)
Current-Year Tax After Per-Taxable-Barrel Credits			\$468.0
Adjustments³			\$11.3
Total Tax After Credits and Adjustments			\$479.3

¹Royalty, Federal and Other Barrels represents the Department of Revenue's best estimate of barrels that are not taxed. This estimate includes state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production.

²Deductible Lease Expenditures represents the department's best estimate of lease expenditures that are applicable to companies that are likely to have a tax liability for the year. The per-barrel expenditures reflect expenditures per taxable barrel and are higher than if this was shown as expenditures per all barrels produced.

³Adjustments include:

- Any credits other than Per-Taxable-Barrel Credits, such as Small-Producer Credits or Net Operating Loss Credits from prior years.
- Private landowner royalty tax, and conservation surcharge.
- Cook Inlet production tax.
- Any prior-year tax payments not deposited in the Constitutional Budget Reserve Fund.
- Additional detail captured in company-specific revenue models that produces results that can differ slightly from the estimates in the simple model above.

Revenue Sources Book Fall 2018

Alaska Department of Revenue • Tax Division • www.tax.alaska.gov

The Department of Revenue complies with Title II of the Americans with Disabilities Act of 1990. This publication is available in alternative communication formats on request. Please contact the Tax Division representative at (907) 465-3692 or via TTY Alaska Relay 711 to make necessary arrangements.

